

Draft
Environmental Impact Report

Fig Garden Financial Center
Phase IV

March 2012

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Prepared for:
CITY OF FRESNO
Development and Resource Management Department
2600 Fresno Street, Rm 3043
Fresno, CA 93721

Prepared by:
DENISE DUFFY & ASSOCIATES, INC.
Environmental Planning & Consulting
947 Cass Street, Suite 5
Monterey, CA 93940

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1.0 Introduction

1.1 AUTHORIZATION AND PURPOSE

This document is an Environmental Impact Report (EIR) for the Fig Garden Financial Center Phase IV project, prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and CEQA Guidelines, as amended. This EIR has been prepared by Denise Duffy and Associates, Inc. (DD&A) for the City of Fresno as the "Lead Agency," in consultation with the appropriate local, regional and state agencies.

The purpose of the EIR is to inform the public generally of the significant environmental effects of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives that support the objectives of the project. As defined by the CEQA Guidelines, Section 15382, "significant effect on the environment" means:

"... a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

The project is the development and implementation of the Fig Garden Financial Center Phase IV project, which consists of a 104,593 square foot, four story commercial office building with an underground parking structure and at-grade parking.

1.2 EIR PROCESS

CEQA Guidelines require preparation of an EIR when a Lead Agency determines that there is evidence that a project may have a significant effect on the environment. The need to prepare an EIR for the project was established by the City of Fresno as a result of preliminary evaluation of the likely environmental effects of the project. The Notice of Preparation (NOP) for the project was circulated to interested agencies and organizations for the required 30-day review period from June 30 to July 30, 2011. Responses to the NOP are contained in Appendix A of this EIR.

This Draft EIR will be circulated for agency and public review during a 45-day public review period. Comments received by the City on the Draft EIR will be reviewed and responses to comments will be provided in the Final EIR. The City must certify that it has reviewed and considered the information in the Final EIR and that the Final EIR has been completed in conformity with the requirements of CEQA.

Although the EIR does not control the lead agency's ultimate decision on the project, the City must consider the information in the EIR and respond to each significant effect identified in the EIR. If significant adverse environmental effects are identified in the EIR, approval of the project must be accompanied by written findings, as follows:

- A. Changes or alterations have been required in, or incorporated into, such project that avoid or substantially lessen the significant environmental effects as identified in the final EIR.
- B. Such changes or alterations are within the responsibility and jurisdictions of another public agency and such changes have been adopted by such other agency, and not the City, or can and should be adopted by such other agency.

- C. Specific economic, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR.

State law requires that a public agency adopt a monitoring program for mitigation measures that have been incorporated into the approved project to substantially lessen or avoid significant effects on the environment. The purpose of the monitoring program is to ensure compliance with environmental mitigation during project implementation and operation. A Monitoring Program will be included in the Final EIR.

It is the intent of this EIR to provide the City of Fresno, decision makers, and the general public with the relevant environmental information to use in considering the project. The City of Fresno would use the EIR for discretionary approvals of the various entitlements required to develop the project.

2.0 Summary

2.1 INTRODUCTION

This summary provides a description of the proposed project, project alternatives, significant impacts, and mitigation measures identified during the environmental analysis. Responsibility for implementation of mitigation measures lies with the project proponent unless otherwise noted. This summary is intended as an overview and should be used in conjunction with a thorough reading of the EIR. The text of this report, including figures, tables, and appendices, serves as the basis for this summary.

2.2 SUMMARY OF PROJECT DESCRIPTION

The project is the development and implementation of the Fig Garden Financial Center Phase IV project. The project proposes a four story commercial office building with an underground parking structure and at-grade parking. A full project description is provided in Section 3.0 of this Draft EIR.

2.3 ALTERNATIVES EVALUATED IN THIS EIR

No Project/No Development. The No Project/No Development Alternative consists of leaving the site in its current, partially developed condition. This would avoid all environmental impacts of the project; however, the project site is not expected to remain in its current condition (i.e., abandoned apartment complex) for the foreseeable future.

Existing General Plan. This alternative assumes buildout of the existing General Plan land use designations for the property of *Medium Low Density Residential (2.19-6.0 dwelling units/acre)* and *Medium High Density Residential (10.38-18.15 dwelling units/acre)*. This would result in the development of a maximum of 57 residential units. Because of its reduced development intensity, the Existing General Plan Alternative would result in fewer environmental impacts compared to the proposed project. This alternative would eliminate the project's significant unavoidable visual impacts and reduce the overall impacts from development including additional traffic, air pollution, and land use compatibility effects. This alternative is, however, anticipated to result in similar public service demands as the proposed project. This alternative would not meet the project objectives of providing a commercial office building on the site adjacent to the Fig Garden Financial Center.

Reduced/Modified Project. The Reduced Project alternative consists of reducing development on the site by 50%, resulting in the construction of approximately 53,000 square feet of office uses in a two-story structure. Due to the decreased size of the proposed office, the Reduced Project Alternative would reduce most environmental impacts compared to the proposed project, particularly related to traffic, air pollution emissions, and service demands. Specifically, this alternative would eliminate the project's significant unavoidable visual/aesthetic impacts. This alternative, however, would not meet the project objectives of providing higher density office uses comparable to the existing office buildings in the Fig Garden Financial Center.

Mixed Use Alternative. This alternative would incorporate the existing Fig Garden Financial Center into a horizontally mixed-use development that includes a new four to six-story, 305-unit residential building. Due to its density, the Mixed Use Alternative would result in an increase in environmental impacts compared to the proposed project. This alternative would result in

significant unavoidable visual/aesthetic impacts from the construction of a new four to six-story residential building and would increase the overall impacts from development including additional traffic, air pollution, and public service demands. This alternative would not meet the project objectives of providing a commercial office building on the site adjacent to the Fig Garden Financial Center.

2.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative to the proposed project be specified, if one is identified. In general, the environmentally superior alternative is intended to minimize adverse impacts to the project site and surrounding environment while achieving the basic objectives of the project. The Reduced Alternative would decrease environmental impacts in most areas compared to the proposed project and would eliminate the project's significant unavoidable impacts to aesthetics/visual quality, while still meeting the basic objective of the project to develop office uses adjacent to the existing Fig Garden Financial Center.

2.5 SUMMARY OF PROJECT IMPACTS

A summary of significant project impacts and mitigation measures are provided in Table 2-1. Mitigation measures have been identified to either avoid the impact or reduce the level of significance. The significance after mitigation implementation is also stated.

2.6 AREAS OF CONTROVERSY

A summary of the EIR process is provided in Section 1.2 of this EIR. The community identified the following as the primary areas of concern and/or controversy during the environmental review process for this project: aesthetic and visual effects from development, tree removal, traffic impacts, introduction of new noise sources, provision of public services, and construction impacts.

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
4.1 Aesthetics		
Development of the project would result in significant visual/aesthetic impacts by altering the existing visual character of the site through the introduction of a new four-story office building adjacent to existing low-scale residential development.	4.1-1 The project proponent shall submit detailed architectural plans, color palettes, and building materials to the City of Fresno Development and Resource Management Department. The plans shall be reviewed by the Planning Director prior to the issuance of any building permit; the review shall be substantially based on the extent to which the final architectural plans deviate from the building plans and building elevations illustrated on Figures 3-3 and 3-4.	Significant unavoidable
	4.1-2 In order to minimize tree removal and associated visual impacts, final landscaping plans shall retain existing mature trees to the extent possible. Final landscaping plans shall also provide enhanced landscape screening between the proposed building and adjacent residential uses and incorporate landscaping continuity between the project and adjacent Financial Center. Final landscaping plans shall be prepared in consultation with, and subject to the approval of, the City of Fresno Development and Resource Management Department.	
The project would create new sources of light that could significantly impact nighttime light levels in the area.	4.1-3 Exterior lighting shall be designed to be consistent with the standards of Illuminating Engineering Society of North America "Lighting for Exterior Environments" (1999) to reduce stray light. Prior to the approval of final design plans for the project, the applicant shall submit a lighting plan for review and approval by the City of Fresno Development and Resource Management Department to assure consistency with the above standard. The lighting plan shall indicate the amount, location, height, and intensity of outdoor lighting sources, limited to the minimum necessary for public safety, including the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare.	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
4.4 Biological Resources		
Development of the project may result in significant impacts to nesting raptors and other migratory birds.	4.4-1 If project activities cannot avoid the nesting season (generally March 1 – August 31), the project proponent shall retain a qualified biologist to conduct focused pre-construction surveys for nesting birds within 15 days of the commencement of construction activities to avoid impacts to any nesting birds present. The pre-construction surveys shall be conducted in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, the biologist shall establish a suitable construction buffer until the young have fledged. For construction activities that occur outside of the nesting season (generally September 1 through February 28), pre-construction surveys are not required.	Less-than-significant
Development of the project would result in the removal of a substantial number of trees. In addition, trees to be retained may be impacted by construction activities.	4.4-2. Prior to issuance of any grading permits, a tree removal and protection program shall be provided by the applicant to the City that includes the following information: 1) location, type, size, and health of all trees to be removed, 2) areas for tree preservation, 3) tree replacement plantings and ratios, and 4) tree protection measures for individual trees to be retained. This program will be defined as part of the Conditional Use permit process.	Less-than-significant
4.5 Cultural Resources		
Construction of the project may result in the discovery and disturbance of unknown, buried archaeological resources and/or human remains.	4.5-1 Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal,	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>reburial, and curation of archaeological resources).</p> <p>4.5-2 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Fresno with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Fresno coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.</p>	
Construction of the project may result in the discovery and disturbance of unknown, buried	4.5-3 Should evidence of paleontological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified paleontologist.	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
paleontological resources.	If evidence of any paleontological resources is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance. The paleontologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate paleontological impacts.	
4.6 Geotechnical and Geological Hazards		
Construction of the project could result in soil erosion as a result of ground disturbing activities.	<p>4.6-1 In order to reduce on-site erosion due to project construction and operation, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods by a registered civil engineer or certified professional. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at least meet the requirements of the SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be limited to the extent feasible to minimize potential erosion related impacts. Additional erosion control measures shall be implemented in consultation with the City of Fresno. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Fresno. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Fresno. Erosion control measures may include, but not be limited to, the following:</p> <ul style="list-style-type: none"> a. Limit disturbance of soils and vegetation disturbance removal to the minimum area necessary for access and construction; b. Confine all vehicular traffic associated with construction to the right-of-way of designated access roads; c. Adhere to construction schedules designed to avoid periods of heavy precipitation or high winds; 	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<ul style="list-style-type: none"> d. Ensure that all exposed soil is provided with temporary drainage and soil protection when construction activity is shut down during the winter periods; and e. Inform construction personnel prior to construction and periodically during construction activities of environmental concerns, pertinent laws and regulations, and elements of the proposed erosion control measures. 	
The project site may be subject to soil hazards including existing fills and settlement potential that could adversely impact proposed structures.	4.6-3 The project proponent shall retain a registered geotechnical engineer to prepare a design-level geotechnical analysis prior to the issuance of any grading and/or building permit. The design-level analysis shall address site preparation measures and foundation design requirements as set forth in Appendix D. The design-level analysis shall be submitted to the satisfaction of the City of Fresno. Final design-level project plans shall be designed in accordance with the approved geotechnical analysis. This shall include certification of engineered fills and subgrade preparation through monitoring of earthwork and compaction testing by a geotechnical engineer during construction.	Less-than-significant
4.7 Hazards and Hazardous Materials		
Development of the project, including excavation, demolition, and other land disturbing activities may result in the potential release of hazardous materials,	4.7-1 The project proponent shall retain a qualified consultant to receive a City permit to locate and remove the former septic systems at 507 and 569 W. San Jose Avenue, and to locate and remove the former leach field at 525 W. San Jose Avenue in accordance with local, state, and	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
presenting a public health risk.	<p>federal guidelines. If evidence of staining, leakage, or odors is identified during removal, the qualified consultant shall assess and remediate any hazardous materials conditions in accordance with local, state, and federal regulatory requirements. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that the septic systems have been removed and any hazardous conditions remediated.</p> <p>4.7-2 The project proponent shall retain a qualified consultant to remove the backfill for the swimming pool at 525 W. San Jose Avenue. The qualified consultant shall remove such materials in accordance with local, state, and federal regulatory requirements. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that the backfill has been evaluated and any hazardous conditions remediated.</p> <p>4.7-3 In order to reduce potential health risks to construction personnel, the project proponent shall retain a qualified consultant to survey all buildings for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Under the San Joaquin Valley Unified Air Pollution Control District’s Rule 4002, written notification to the Air District is also required for demolition and asbestos removal activities. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that all asbestos containing material has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards.</p> <p>4.7-4 In order to reduce human health risks to construction personnel, the project proponent shall retain a qualified consultant to conduct a lead-</p>	

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	based paint survey to evaluate the presence of lead-based paint prior to demolition. If lead-based paint is observed within existing buildings and the surrounding area, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control polices. All site soils contaminated by lead-based paint shall be removed and properly disposed prior to any construction activities. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno or designated representative from a qualified consultant demonstrating that all lead-based paint has been properly removed and that no further health hazards related to lead-based paint exist on-site.	
4.8 Hydrology and Water Quality		
Construction and operation of the project could impact surface water quality.	4.8-1 Prior to the issuance of a grading permit, the project applicant shall obtain a National Pollution Discharge Elimination System Program General Construction Permit from the State Water Resources Control Board and provide evidence of such permit to the City of Fresno.	Less-than-significant
Construction and operation of the project could impact groundwater quality.	4.8-2 Prior to the issuance of a grading permit, all existing on-site wells shall be located to determine that they have been properly abandoned in accordance with state and local requirements. The project applicant shall submit evidence to the City of Fresno documenting compliance with this measure. If any on-site wells have not been appropriately abandoned, remedial procedures shall be implemented to properly abandon the wells in accordance with state and local requirements.	Less-than-significant
4.10 Noise		
Operational noise from the proposed ventilation fans for the underground garage could exceed City noise standards, resulting in significant noise impacts on adjacent sensitive residential uses.	4.10-1 The project proponent shall install new ventilation systems that limit noise levels to an hourly L_{eq} of 45 dBA or below at the closest off-site noise-sensitive uses by appropriate design and shielding of proposed fan inlet/outlet openings. This can include use of quiet-technology equipment, acoustical louvers, or acoustically absorptive treatments	Less-than-significant

TABLE 2-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION		
Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	within air ducts. The proponent shall incorporate the appropriate fan design and/or shielding into final design plans and submit to the City of Fresno Development and Resource Management Department for review prior to issuance of a building permit.	
4.11 Public Services		
Although project development would not result in a direct increase in student population, the project would indirectly increase demands on school services.	4.11-1 The applicant shall pay a school impact fee pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees, subject to the review and approval of the City of Fresno and Fresno Unified School District. The fees set forth in Government Code Section 65996 constitute the exclusive means of both “considering” and “mitigating” direct impacts upon school facilities [Government Code Section 65996(a)].	Less-than-significant
4.13 Utilities and Service Systems		
Development of the proposed project would require the construction of new water infrastructure in order to address existing infrastructure deficiencies identified by the City of Fresno.	<p>4.13-1 In order to ensure adequate water system distribution capacity, the project applicant shall replace the existing 8-inch water main in North Palm Avenue between West Shaw Avenue and West Barstow Avenue with a 12-inch water main. The City of Fresno Department of Public Utilities Water Division has determined that these improvements are necessary to accommodate the proposed project. Prior to the issuance of any building permit, the project proponent shall submit design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating that adequately sized infrastructure will be provided in accordance with this mitigation measure. Design-level drawings shall be subject to the City’s review and approval.</p> <p>4.13-2 In order to ensure adequate water system distribution capacity, the project applicant shall replace the existing 6-inch water main in West San Jose Avenue from North Colonial Avenue to approximately 850 feet east with an 8-inch water main. The City of Fresno Department of Public Utilities Water Division has determined that these improvements are necessary to accommodate the proposed project.</p>	Less-than-significant

**TABLE 2-1
SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION**

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	<p>Prior to the issuance of any building permit, the project proponent shall submit detailed design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating compliance with this measure. Final plans shall be subject to the City’s review and approval.</p> <p>4.13-3 Install booster pump facilities to serve the project’s domestic and fire water use. Prior to the issuance of any building permit, the project proponent shall submit detailed design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating that booster pump facilities will be provided to meet domestic and fire demand of the project. Final plans shall be subject to the City’s review and approval.</p> <p>4.13-4 Prior to the issuance of any building permit, the project proponent shall submit detailed infrastructure plans that include pipelines within the project site to interconnect to future recycled water distribution mains that may be developed by the City to allow supply of such recycled water for on-site irrigation purposes, subject to the review and approval of the City of Fresno Department of Public Utilities Water Division and the Planning Division.</p>	

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3.0 Project Description

This section presents the project description as required by CEQA Guidelines Section 15124. The Fig Garden Financial Center Phase IV project (hereafter “project”) proposes development of a four story commercial office building and associated parking. The office building would comprise a total of 104,593 square feet of net useable area, with an underground parking structure and at-grade parking to accommodate approximately 474 vehicles. The underground structure will be accessed onsite, via the driveway/parking area at the adjacent four story commercial office building. Development entitlements for this project include an amendment to the City of Fresno 2025 General Plan (hereafter “General Plan” or “2025 General Plan”), Rezoning, Conditional Use Permit, and Vesting Tentative Parcel Map.

The proposed office building structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Fig Garden Financial Center. The project is proposed to be constructed and completed in a single phase.

Primary access to the site would be from North Palm Avenue through the Fig Garden Financial Center’s driveway and from Shaw Avenue via private driveways. No public access will be provided from West San Jose Avenue, although emergency fire access and an emergency pedestrian gate will be available. No parking will be permitted along West San Jose Avenue.

3.1 PROJECT LOCATION AND AREA

The project is located in the City of Fresno in Fresno County (refer to Figure 3-1). The project site address is 507 West San Jose Avenue, 525 West San Jose Avenue, and 569 West San Jose Avenue. The project site is situated near the northeast corner of North Palm Avenue and West Shaw Avenue, and is bounded by the Fig Garden Financial Center to the west, West San Ramon Avenue, North Colonial Avenue and West San Jose Avenue to the north, the Fig Garden Village shopping center to the south, and single- and multi-family residential development to the north, south, and east. The project is located on approximately 4.69 acres, comprised of APNs 417-240-03, 417-240-37, 417-231-16, and 417-231-17.

3.2 PROJECT OBJECTIVES

The Fig Garden Financial Center Phase IV project proposes a new commercial office building to meet the applicant’s following objectives:

- The underlying purpose of the project is to replace an aged former two-story apartment complex structure with a four story office structure developed in a style consistent with the three existing adjacent office facilities that comprise the Fig Garden Financial Center, at a scale that is economic to develop, lease, and manage.
- Develop the project site in a fashion that takes advantage of the site's strategic location as a primary location for activity centers within plan areas.
- Assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function.

- Provide an in-fill commercial office use that is strategically located to ensure accessibility and convenience its service population, while minimizing travel requirements, infrastructure demands, and adverse effects.
- Develop the subject site in a manner that provides an effective transition between more intensive commercial uses and adjacent sensitive residential areas.

3.3 PROJECT CHARACTERISTICS

The Fig Garden Financial Center Phase IV project proposes development of a four story commercial office building and associated parking. The conceptual site plan for the project is presented in Figure 3-2. Building plans showing the office development at the ground and underground parking structure levels are provided in Figures 3-3A and 3-3B. Elevations are shown in Figure 3-4. An access plan, showing proposed vehicular access onto the site, is shown in Figure 3-5.

Land Use Entitlements

A description of the various components of the project is provided below. Development entitlements for this project include a General Plan amendment, Rezoning, Conditional Use Permit, and Vesting Tentative Parcel Map. The land use entitlements proposed by the project and affected parcels are detailed in Table 3-1 below.

Address	APN	Current Zoning/ Existing Use	Proposed Zoning	Current General Plan	Proposed General Plan	Acres	Sq. Ft.
507 W. San Jose Ave	417-240-03	R1-AH/ Single Family Residence	C-P	Residential Medium Low Density	Commercial Office	0.73	31,798
525 W. San Jose Ave	417-240-37	R1-AH / Vacant	C-P	Residential Medium Low Density	Commercial Office	1.42	61,855
569 W. San Jose Ave	417-231-16	R2 / Former Apt Complex	C-P	Residential Medium High Density	Commercial Office	2.35	102,366
No Address	417-231-17	R1-AH	C-P	Residential Medium Low Density	Commercial Office	0.19	8,276
Acreage to be Rezoned and Use Amended						4.69	204,295
Source: Scott A. Mommer Consulting, 2011							

The purpose of the land use entitlements sought from the City of Fresno is to support the development of the project site with a four story 60 foot commercial office building. To achieve this purpose, the site's General Plan and Zoning residential designations will be amended to support a Commercial Office/C-P project consistent with the designations allocated to the existing Fig Garden Financial Center. The proposed 60-foot building height will be supported by a Conditional Use Permit issuable under Section 12-216.5-B-1(a) of the Fresno Municipal Code, in accordance with the procedures and standards set forth in Section 12-105 and 12-406.

The required order of approval of the entitlements is as follows:

1. General Plan Amendments for the site's land use designation to Commercial Office.
2. Rezoning Amendments for the project site to C-P, a use permissible in a Commercial Office Plan designation.
3. Vesting Tentative Parcel Map to combine four existing separate parcels into a single parcel and adjusting the parcel line between the project site and an adjacent parcel.
4. Conditional Use Permit to authorize a 60 foot building height.
5. Minor Site Plan Amendment for the existing approved site plan for the adjacent office property (5200 Palm Avenue) to conform that parcel's site plan to the Tentative Parcel Map. This is required to modify the site layout and circulation at the adjacent office building as it relates to the proposed new office building.
6. Grading and Building Permit approvals.

Building Design

The project proposes a four-story commercial office building approximately 104,593 square feet in size. The building would be constructed of concrete, steel, and wood-frame structures. The building height is proposed at 60 feet (refer to Figure 3-4). The color palate consists of beige travertine panel exterior and dark bronze windows. The proposed office structure is proposed at the same height and with comparable setbacks as the adjacent office development. The proposed project includes a six-foot high masonry wall along the north, south, and east boundaries of the site.

Landscaping

The project proposes a plaza area with a fountain and landscape planters containing trees, shrubs, and other ornamental plants (refer to the Site Plan in Figure 3-3). Landscaping is proposed in the plaza, along the site's perimeter, and within the surface parking areas. All plantings will be illustrated in a Landscape Plan. There are existing trees on the project site that were part of the former apartment complex; these trees will be removed to accommodate the proposed project.

Sustainable Design Features

The project would be constructed in accordance with the "Fresno Green" Building Incentive Program. The project may include such measures as recycling of construction debris, energy-efficient design techniques and appliances, installation of water-conservation systems, and use of sustainable materials.

Access

The project site would be accessed from Palm Avenue through the adjacent Fig Garden Financial Center's driveway and from Shaw Avenue via private driveways through Fig Garden Village Shopping Center. The underground structure will be accessed onsite, via the driveway/parking area at the adjacent four story commercial office building, with no direct vehicle access to the City street system. No public access will be available from San Jose Avenue, although emergency fire access and an emergency pedestrian gate will be provided from this street. The curb on San Jose Avenue along the site's north frontage will prohibit parking by means of a red curb or other methods. An access plan, showing proposed vehicular access onto the site, is presented in Figure 3-5.

Pedestrian access to the office building is proposed via two entrances, one on the north side of the building and the other on the south. Sidewalks are available on San Jose Avenue, Colonial

Avenue, and San Ramon Avenue. Pedestrian access to/from the Fig Garden Shopping and Financial Centers is available through the adjacent office building parking lot, similar to the vehicular access.

Parking

The project would be required to meet, at a minimum, City of Fresno parking standards for specified uses. The office building would provide parking for approximately 474 vehicles in an underground garage and surface lot. The project also proposes 12 bicycle parking spaces near the office building entrances.

Water System

The project is located within a fluoridated potable water system zone, with service provided by the City of Fresno Water Division. The project proposes to upgrade existing water mains adjacent to the property to provide adequate water pressure and pipeline sizing to meet the additional water demands of proposed development (or the project applicant will request to be removed from the district). In addition, one public fire hydrant is proposed along the frontage at W. San Jose Avenue, and one on-site public and one onsite private fire hydrant are proposed on the project property. In addition to these infrastructure improvements, the project proposes a series of design features intended to reduce the extent of water use at the adjacent Fig Garden Financial Center. These measures are intended to offset water demand associated with the proposed project and will be incorporated as conditions of approval, as follows:

- Retro-fit all existing irrigation controllers with “Smart Controllers” (evaporation transpiration governed controllers). All new irrigation controllers associated with the proposed project will be likewise equipped.
- Retro-fit approximately 110 toilets to reduce water usage per flush from 3.5 gallons to 1.6 gallons.¹ The retrofit of toilets and Smart Controllers shall be in place for the life of the project and are permanent. Proper equipment and construction methods will ensure the expected long term water savings will be achieved.
- All new landscaping will conform to the State’s new “Waterwise” standard. The State of California has adopted new landscape efficiency standards and the proposed office building project and associated landscaping will meet or exceed those requirements.
- Irrigation controllers will be set to operate during off peak water demand periods.

Sanitary Sewer

The City of Fresno maintains the existing public sanitary sewer system in the project area. The proposed building layout would require removal and re-routing of an existing 8-inch sanitary sewer main. (Note: a temporary sewer bypass would be provided to maintain existing sewer service prior to removal). This relocation would occur along the south property line and the facility would remain as a public sewer main. Due to the shallow depth of sewer line, the project would need to provide a 20-foot wide sewer easement, to be dedicated to the City.

¹ The calculations account for a conservative 10% reduction of actual water consumption. According to a 2002 Retrofit Strategy Report prepared for HUD, the retrofit of toilets are anticipated to reduce water consumption by 10.77% or 6 gallons per capita a day.

Storm Drain System

Storm water runoff from the project site would be controlled through implementation of a Storm Water Management Plan. Storm water runoff from the project site would drain into the existing curb inlet located at W. San Jose Avenue via two proposed 10-inch storm drain laterals with flap gates. The project would install a sump pump for drainage of a proposed pump room in the basement parking garage, which would drain into the existing privately maintained catch basin located at the existing Fig Garden Financial Center parking lot. In addition, a peak-reducing storm drain system would be installed to minimize increases in runoff. The location and specific type of peak-reducing system would be developed upon final project design.

Grading

The project would require extensive grading to facilitate construction of the proposed office building and parking garage. Proposed grading would occur on the project site requiring the removal of approximately 35,000 cubic yards of material. This material would be deposited at a location approved by the City, for reuse as appropriate (e.g., for clean fill).

Operations

The proposed office development will support a total of 400 employees. The office building will generally operate during normal working hours (Monday through Friday 8 AM – 5 PM), but may also be used during other hours as required by tenants.

Project Schedule

The proposed office building would be constructed in a single phase. Construction is tentatively scheduled for 2012.

3.4 REQUIRED PERMITS AND APPROVALS

The EIR will be used in support of the following entitlement considerations by the City of Fresno as the Lead Agency.

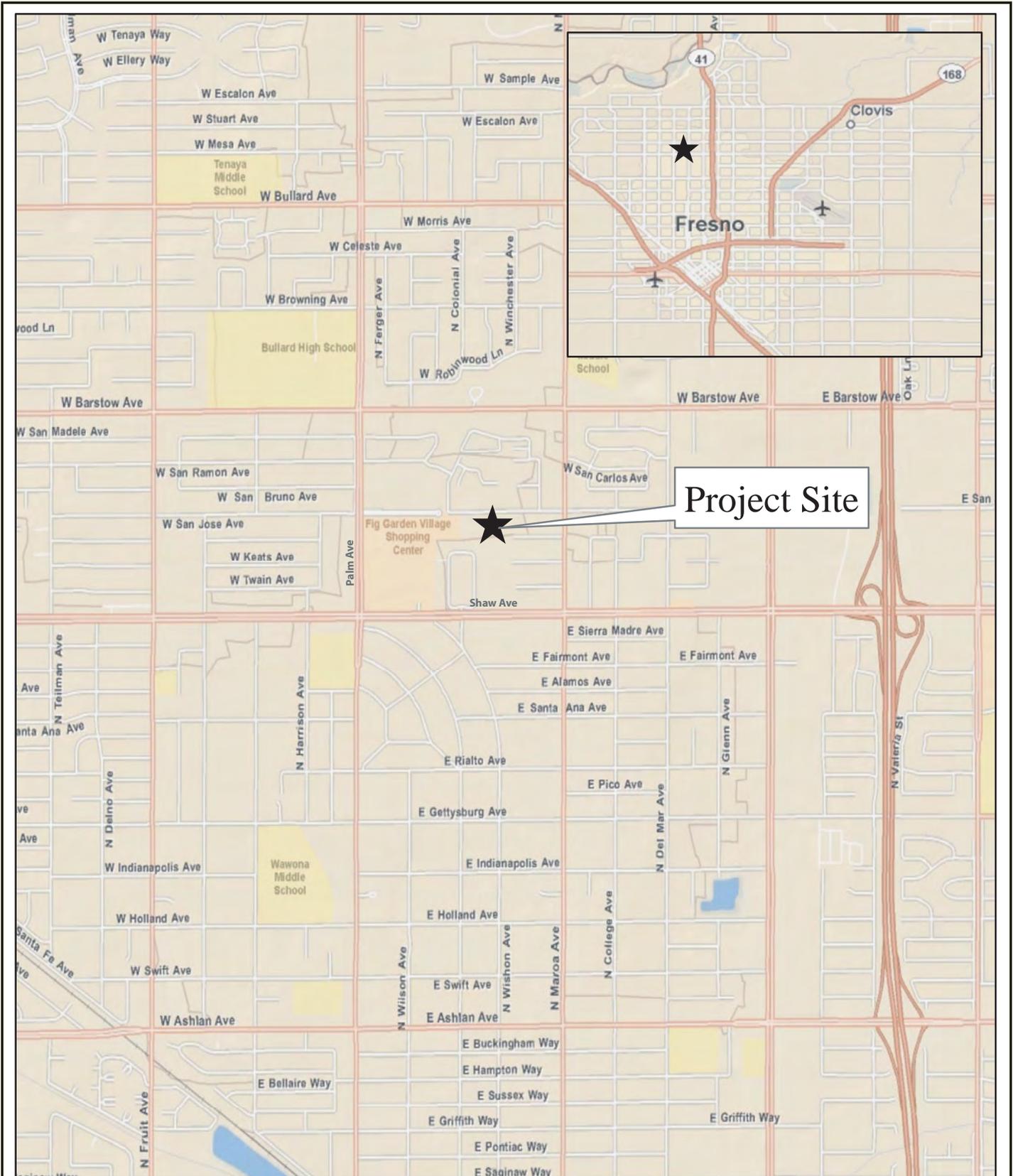
- Certification of the EIR
- A General Plan Amendment, revising the project site planned land use designation from Residential Medium Low Density and Residential Medium High Density to Commercial Office.
- A Rezoning Amendment, revising the project site zoning from R1-AH and R-2 to CP.
- A Vesting Tentative Parcel Map, to combine four existing separate parcels into a single parcel (and adjusting the parcel line between the project site and an adjacent parcel).
- A Conditional Use Permit, to authorize a 60-foot building height.
- A minor Site Plan amendment for the existing approved site plan for an adjacent property (5200 North Palm) to conform that parcel's site plan to the Tentative Parcel Map and the improvements proposed for the project's Site Plan.
- Grading and Building Permit Approvals

The following agencies are also presently expected to use the EIR for their decision making for certain entitlements, including those listed below.

- The Fresno Metropolitan Flood Control Districts – co-approval with the City of Fresno of final drainage plans.
- The San Joaquin Valley Air Pollution Control District - permits for demolition and site clearance, and for indirect source review under its Rule 9510.
- California Regional Water Quality Control Board Central Valley Region National - Pollutant Discharge Elimination Permit, Storm Water Pollution Prevention Plan

3.5 USES OF THE EIR

It is the intent of this EIR to provide the City of Fresno, decision makers, and the general public with the relevant environmental information to use in considering the project. The City of Fresno would use the EIR for discretionary approvals of the various entitlements required to develop the project.

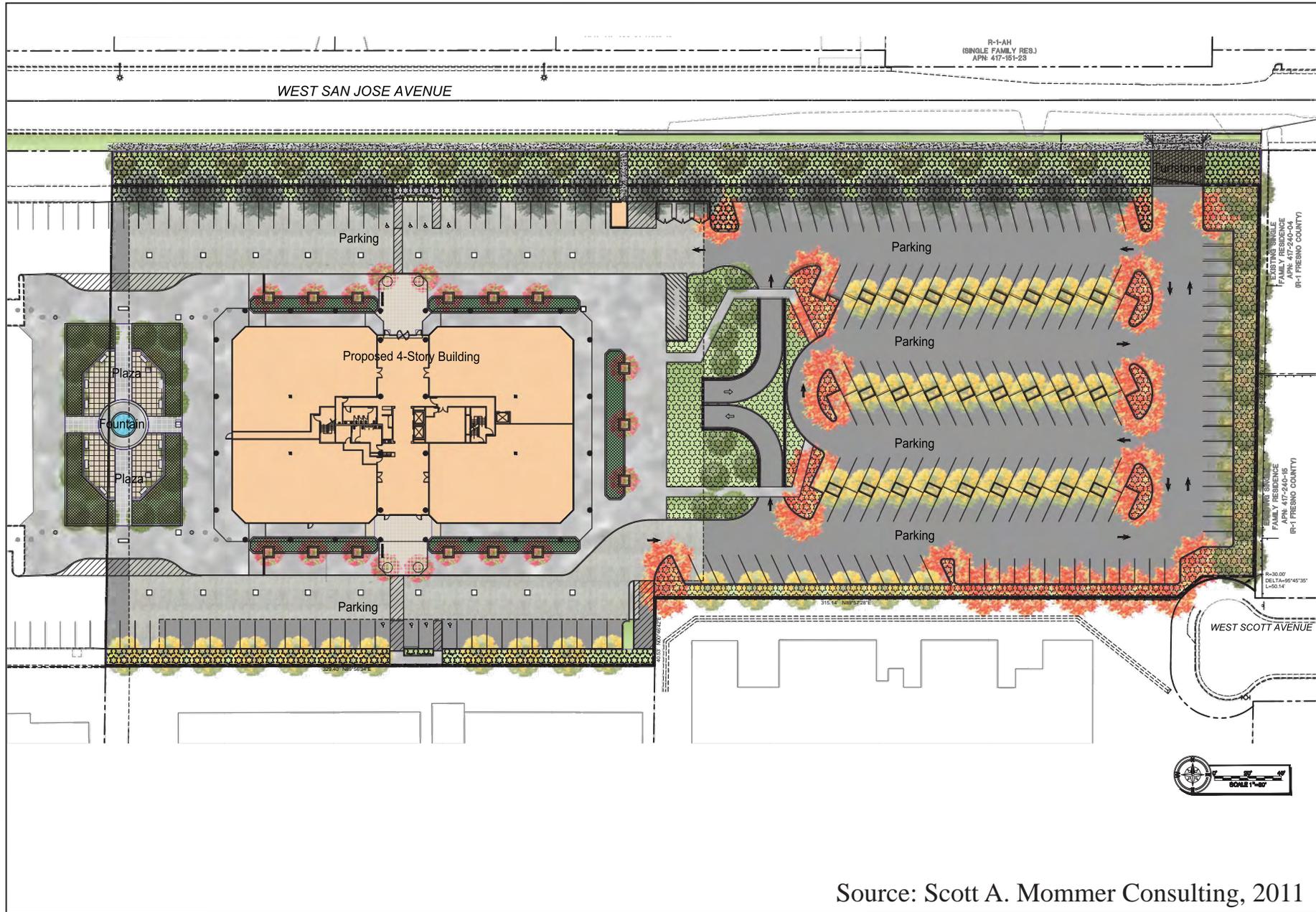


Project Site



Location Map

Figure 3-1

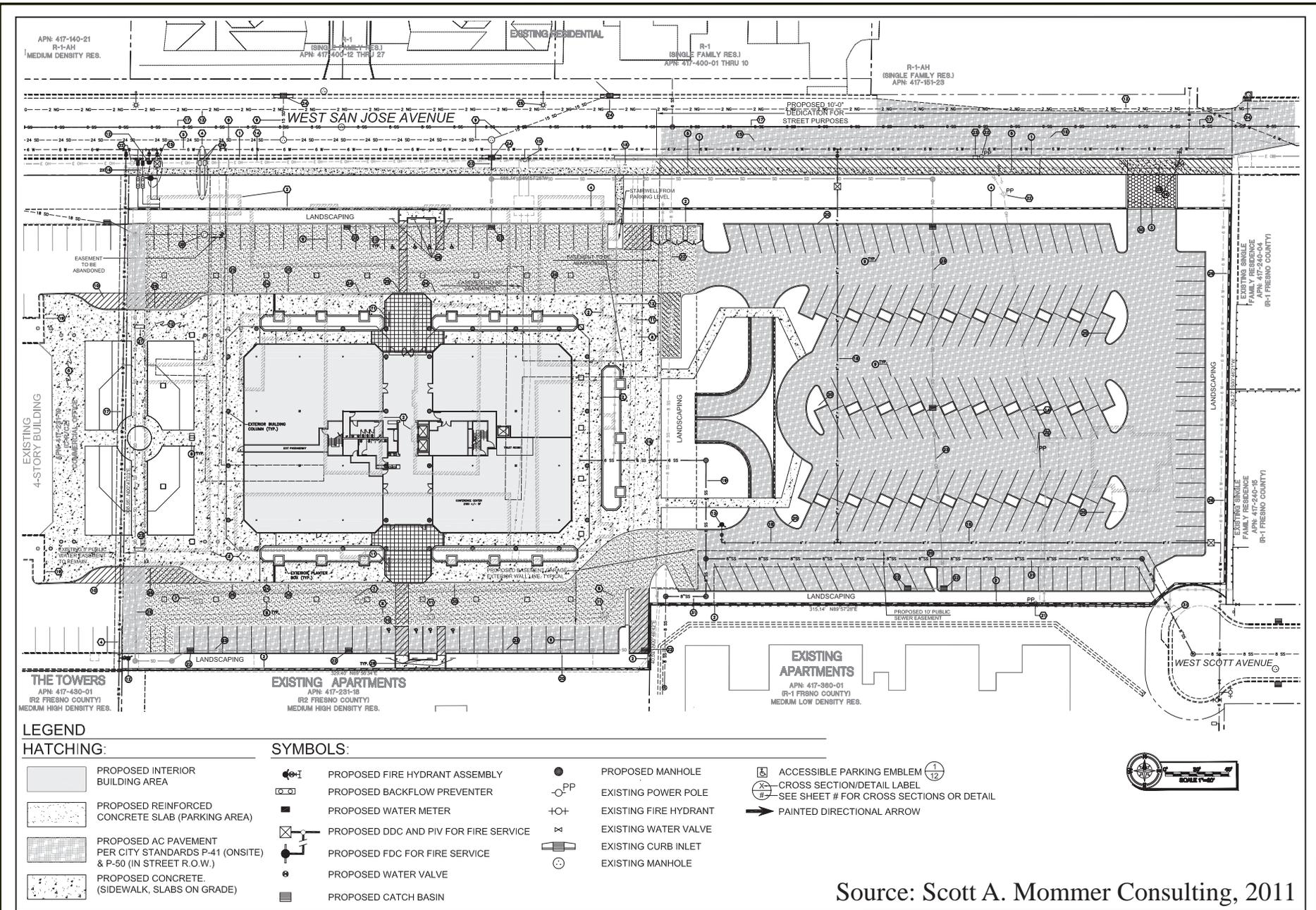


Source: Scott A. Mommer Consulting, 2011



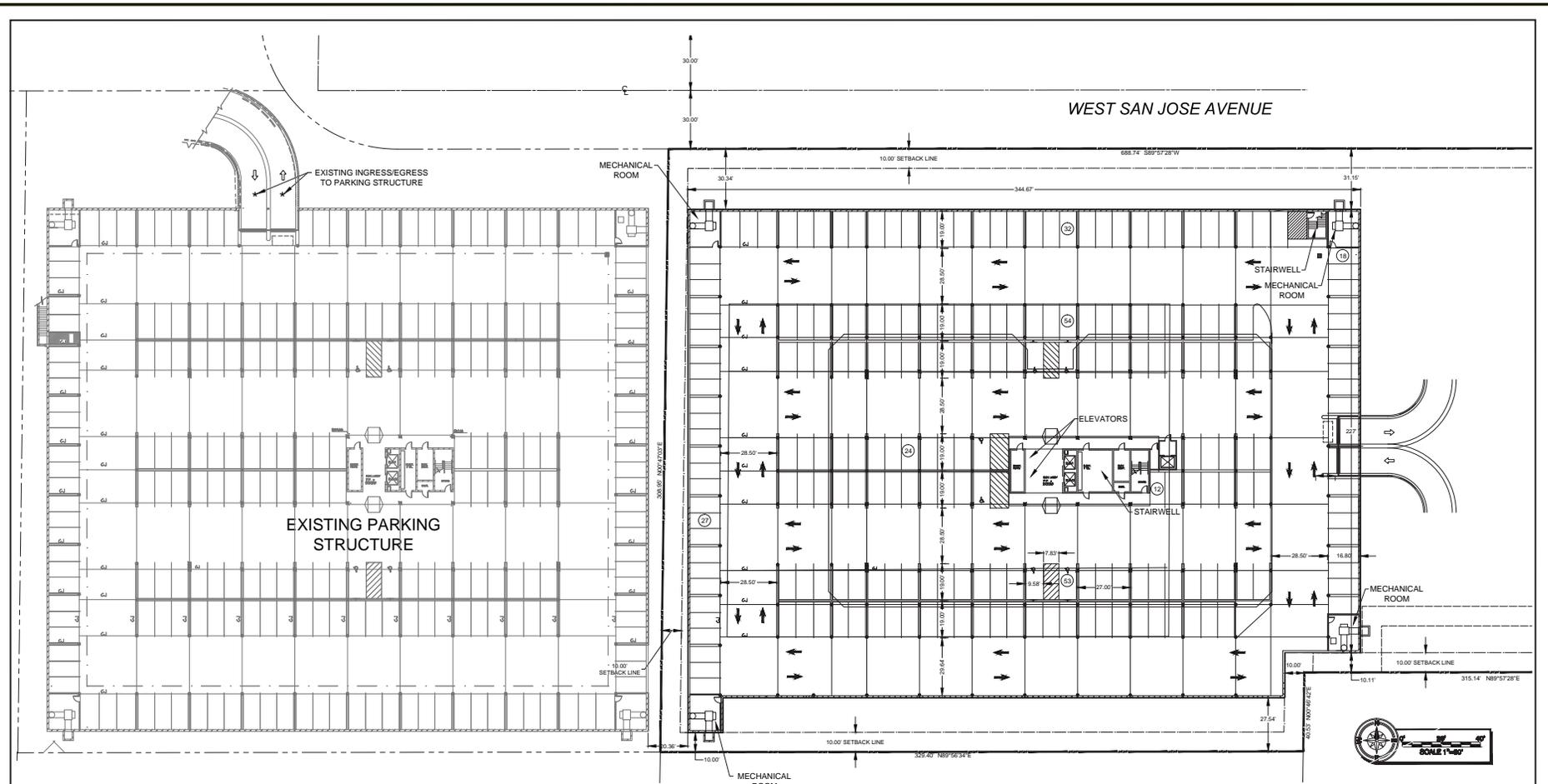
Conceptual Site Plan

Figure
3-2



Ground Level Building Plan

Figure 3-3A



BUILDING AREA

GARAGE PARKING: 83,076 S.F.

PARKING INFORMATION:

GROUND LEVEL:
 STANDARD SPACES: 246 STALLS
 ACCESSIBLE SPACES: 8 STALLS
 TOTAL PARKING PROVIDED: 254 STALLS

LOWER PARKING LEVEL:
 STANDARD SPACES: 214 STALLS
 ACCESSIBLE SPACES: 6 STALLS
 TOTAL PARKING PROVIDED: 220 STALLS

TOTAL SITE:
 STANDARD SPACES: 460 STALLS
 ACCESSIBLE SPACES: 14 STALLS
 TOTAL PARKING PROVIDED: 474 STALLS

Source: Scott A. Mommer Consulting, 2011



Parking Garage Building Plan

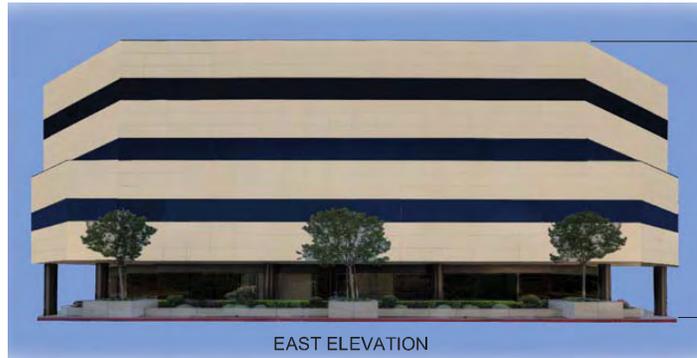
Figure 3-3B



NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



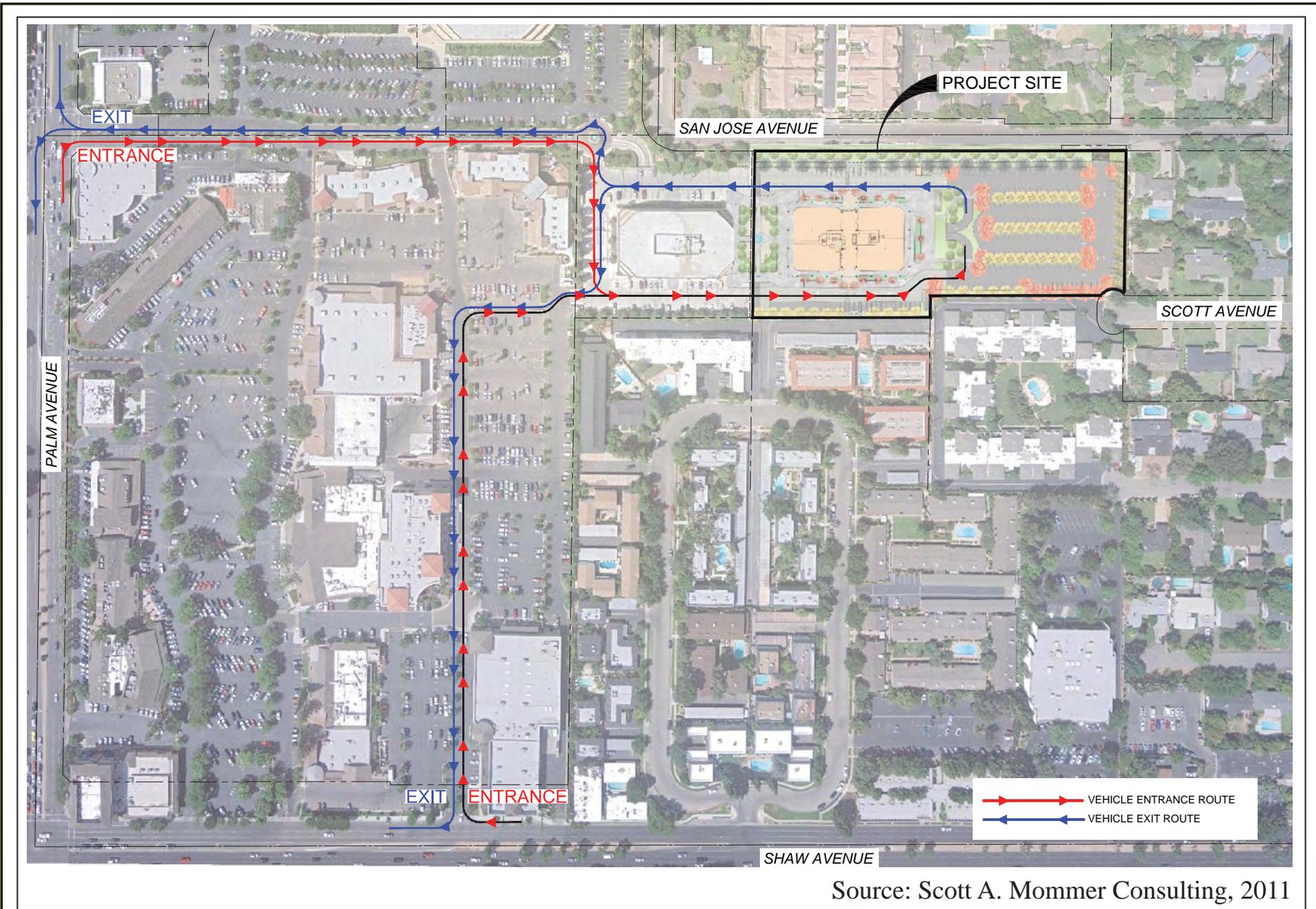
WEST ELEVATION



Source: Scott A. Mommer Consulting, 2011

Elevations

Figure
3-4



Source: Scott A. Mommer Consulting, 2011



Vehicular Access Plan

Figure
3-5

4.0 Environmental Setting, Impacts and Mitigation Measures

This section describes each of the environmental categories affected by the proposed project. Each category consists of three parts: Introduction, Environmental Setting, and Impacts and Mitigation Measures. Environmental impacts can be described as follows: less-than- significant, potentially significant, significant adverse, and significant unavoidable. The specific criteria for determining the significance of a particular impact are identified prior to the impact discussion in each issue section, and are consistent with significance criteria set forth in CEQA Guidelines and local, regional, state or federal standards.

A separate Mitigation Monitoring Program (as required by PRC §21081.6) will be developed in conjunction with the Final EIR, that outlines the mitigation measures and the monitoring and reporting methods that would be employed. The Mitigation Monitoring Program will be considered for adoption by the City Council at the time the Final EIR is certified.

Under CEQA, a significant impact is defined as a substantial, or potentially substantial, adverse change in the environment (Public Resources Code 21068). The guidelines implementing CEQA direct that this determination be based on scientific and factual data. The specific criteria for determining the significance of a particular impact are identified prior to the impact discussion in each section, and are consistent with significance criteria set forth in the guidelines implementing CEQA.

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4.1 AESTHETICS

Introduction

This section assesses the existing visual quality of the project site and potential changes to the visual and aesthetic environment that would result from proposed development. In assessing the visual quality of a site, it is important to consider that visual quality is not determined solely by the physical attributes of a project, but also by the relationship between the project and the total visual environment.

The visual analysis provided below is based on field review and site plan analysis conducted by the EIR consultant, photos of the project site from various vantage points and circulation routes, and photo and shadow simulations of the development provided by the project architect. Prior to the site visit, aerial photographs and maps were studied, and areas of special interest or potential scenic value were noted for assessment during the field review.

Setting

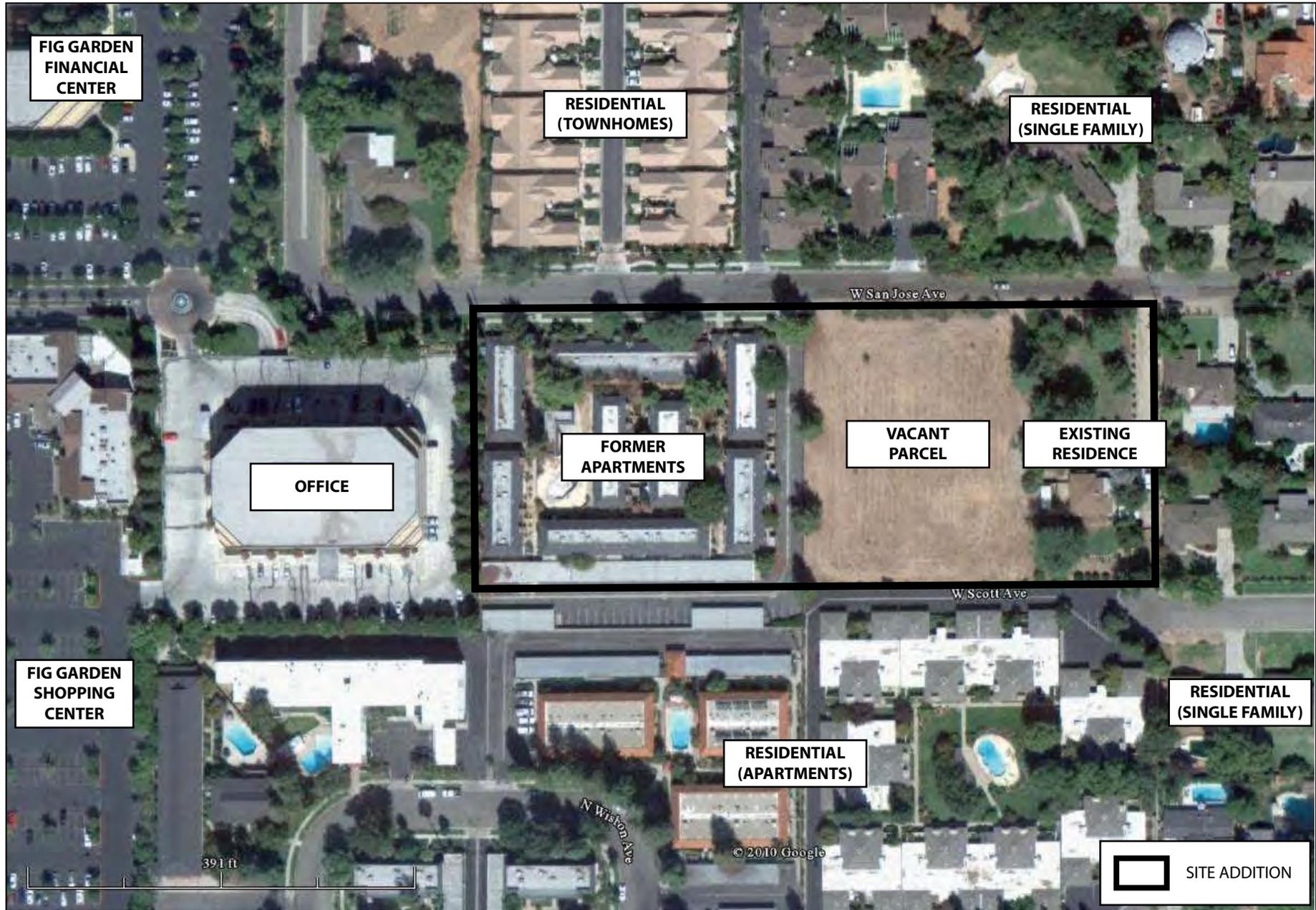
The City of Fresno lies within the eastern portion of the San Joaquin Valley, a large relatively flat valley flanked by the Sierra Mountains to the east, the Coastal Ranges to the west, and the Tehachapi Range to the south.

The project is located within an urbanized area in the northwest portion of Fresno, in the Fig Garden community. The property is situated near the northeast corner of Palm Avenue and Shaw Avenue, and is bounded by the Fig Garden Financial Center to the west, West San Ramon Avenue, North Colonial Avenue and West San Jose Avenue to the north, and the Fig Garden Village shopping center to the south.

The new commercial office building is proposed on 4.69 acres. The proposed office building is surrounded by a four-story, 60-foot high office building to the west, and single- and multi-family residential development to the north, south, and east (refer to Figure 4.1-1).

The existing visual character of the site consists of a former two-story apartment complex, a vacant parcel, and a residential property. The west portion of the project site contains the former Eden Park Apartment complex, which consists of eight former apartment buildings, a restroom building, a fenced-in swimming pool, carports, parking areas, and landscaping. The central portion of the site is vacant and formerly contained a residence and swimming pool. The east portion of the property contains a single family residence and yard. The vacant parcel consists of recently tilled land with little vegetation. The remainder of the site contains a number of trees, including redwood, pine, palm, olive, and fig species. A total of 138 trees have been identified on the project site based on plans provided by the applicant.

Views of the existing development portion of the Fig Garden Financial Center site from the residential neighborhoods to the north and east are impeded by existing block walls and trees. More distant views of the existing Fig Garden Financial Center may be available from the Fig Garden Shopping Center. Views of the project site are available from surrounding streets and existing residential areas, primarily from locations adjacent to the site along W. San Jose Avenue, W. Scott Avenue, the southern portion of Colonial Avenue, and the northern portion of N. Wishon Avenue. Representative views of the existing site and surrounding properties are provided in the photographs presented in Figures 4.1-2 and 4.1-3.



Aerial of Site and Surrounding Area

Figure 4.1-1



Photo 1: View of vacant parcel at 525 W. San Jose Avenue from the street looking southwest



Photo 2: View of vacant parcel at 525 W. San Jose Avenue.



Photo 3: View of front of former apartment complex at 569 W. San Jose Avenue.



Photo 4: View of rear of former apartment complex at 569 W. San Jose Avenue.

Site Photos

Figure
4.1-2



Photo 5: View of office building at Fig Garden Financial Center, adjacent to former apartment complex.



Photo 6: View of existing residences along W. San Jose Avenue north of the proposed residential building.



Photo 7: View of existing residences along W. San Jose Avenue north of the proposed residential building.



Photo 8: View of existing apartment building(s) south of the proposed residential building, west of W. Keats Avenue.

Site Photos

Figure
4.1-3

Regulatory Environment

California State Scenic Highway Program. The California State Scenic Highway program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are either designated or eligible for designation as a scenic highway. The project site is not located along or near any state or other scenic highways or corridors.

2025 Fresno General Plan. The General Plan contains several policies intended to protect the visual character of the City. The site is not located in any identified scenic areas of the City. An analysis of the aesthetic and visual resource policies that apply to the proposed development is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR.

City of Fresno City-Wide Design Guidelines. The City adopted design guidelines as part of the 2025 General Plan to promote the improvement of the visual and built environment city-wide. The guidelines apply to site layout, building design, landscaping, lighting, parking, and signage.

Fresno City Municipal Code. Chapter 13 Article 3 of the City of Fresno Municipal Code provides policies regarding tree removal and alteration. The tree removal permit process per Chapter 13 Article 3 identifies replanting and/or relocation requirements.

Bullard Community Plan. The Bullard Community Plan contains policies intended to protect the aesthetic character of the area. Applicable policies are identified in Table 4.9-3 in Section 4.9 Land Use and Planning of this EIR; please refer this table for a detailed discussion of the project's consistency with applicable Bullard Community Plan requirements.

Thresholds of Significance

In accordance with the California Environmental Quality Act (CEQA) Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impacts and Mitigation

Scenic Resources

The project site lies within an urbanized area of Fresno. The project site is located adjacent to three 60 foot office buildings (i.e., Fig Garden Financial Center). The project site has been previously developed with multi-family and single family residential uses. The site does not contain any notable scenic resources, nor does it afford views of scenic vistas. Finally, the project is not located within or along any City or state-designated scenic routes. The project would result in the removal of existing trees on the site, which will be replaced with proposed landscaping. This issue is addressed further below under "Visual Character." The project would not have a

substantial adverse effect on a scenic vista, nor would it substantially damage scenic resources (such as trees or rock outcroppings) within view of a state scenic highway. Additionally, the project would not have a significant adverse aesthetic impact on parks, historical resources, undeveloped areas, and visual resources identified by a general, community, or specific plan, as none of these occur in the immediate project area. **The project would have a less-than-significant impact on scenic resources and vistas.**

Visual Character

The proposed project would alter the existing visual character of the site and its surroundings by removing the 44-unit apartment complex and constructing a new four-story office building. The proposed 104,593 square-foot building that includes a subterranean parking garage and surface parking areas. The building height is proposed at 60 feet, consistent with surrounding Financial Center structures. The office building is of modern style, with a flat roofline, beige travertine panel exterior, and dark bronze windows. Elevations of the proposed office building are presented in Figure 3-4. The first floor of the proposed office building will be set back approximately 85 feet from the south property line and approximately 105 feet from the north property line. Because the second floor is cantilevered over the first floor, the proposed office building's second floor will be set back approximately 75 feet from the south property line and about 94 feet from the north property line. A six foot masonry wall is proposed along the north, south, and east boundaries of the site.

The project proposes common open space area including a plaza with fountain and landscape planters containing trees, shrubs, and other ornamental plants on the property just west of the new office building (refer to the Site Plan in Figure 3-2). Landscaping is also proposed along the site's perimeter and within the surface parking areas. Visual simulations showing before photos and project renderings of the office building from three perspectives surrounding the project site are presented in Figures 4.1-4A through 4.1-4C.

The project generally conforms to the *City-Wide Design Guidelines Adopted for the 2025 Fresno General Plan*, which apply to site layout, building design, landscaping, lighting, parking, and signage. From a visual/aesthetic perspective, the proposed office building would be consistent with the office and commercial uses to the west that are part of the Fig Garden Financial Center and Fig Garden Shopping Center. The existing Financial Center consists of three, four-story office buildings approximately 60 feet in height. However, the proposed four-story office building could visually impose on adjacent residential uses to the north, south, and east. The nearest residences to the project are located over 100 feet to the south (existing apartments) and more than 135 feet to the north (existing single family along W. San Jose Avenue). The project would intensify development compared to existing conditions and contrast with the adjacent residential community, which consists of one and two-story residences. In addition, the project would reduce existing vacant areas on the site and remove existing vegetation including up to 115 trees on the property.



Existing View



Proposed View

Photo Simulations
From East Property Line Looking West

Figure
4.1-4A



Existing View



Proposed View

Photo Simulations
From West San Jose Avenue Looking South

Figure
4.1-4B



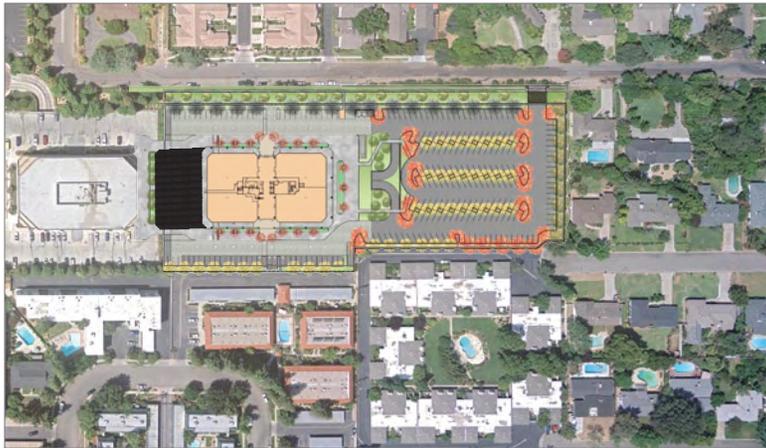
Existing View



Proposed View

Photo Simulations
From South Property Line Looking North

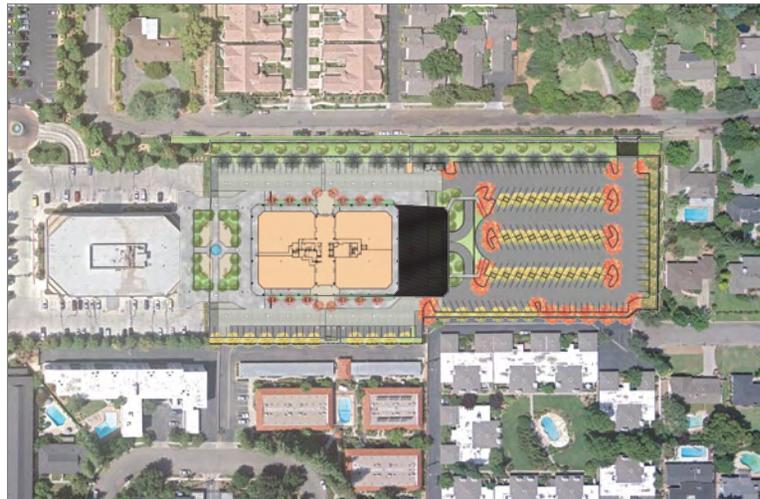
Figure
4.1-4C



SUMMER SOLSTICE
JUNE 21 : 9am



SUMMER SOLSTICE
JUNE 21 : 12pm



SUMMER SOLSTICE
JUNE 21 : 5pm



Source: Scott A. Mommer Consulting, 2011

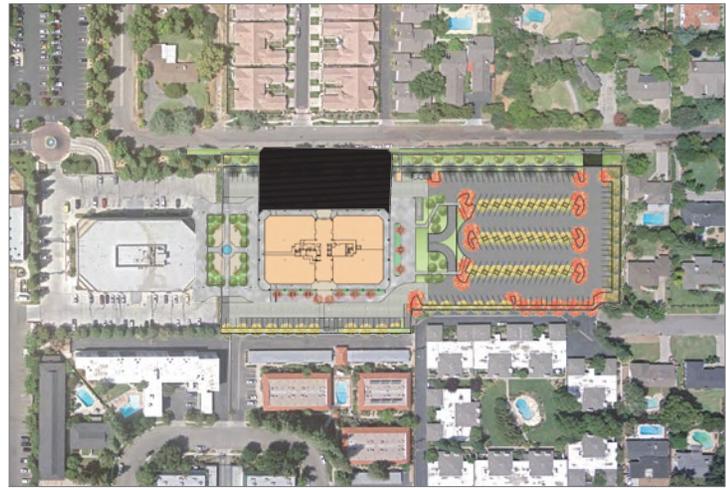


Shadow Simulations - Summer

Figure
4.1-5A



WINTER SOLSTICE
DECEMBER 21 : 9am



WINTER SOLSTICE
DECEMBER 21 : 12pm



WINTER SOLSTICE
DECEMBER 21 : 3pm



Source: Scott A. Mommer Consulting, 2011



Shadow Simulations - Winter

Figure
4.1-5B

The proposed office building would also slightly increase shade in the surrounding area. Shadow simulations were prepared for the building by the project architect for various representative time periods during the winter and summer solstices. Graphic representations of these simulations are provided in Figures 4.1-5A and B. The results of these simulations show that shadows would not extend onto any adjacent residential yards during all studied time periods. During the worst-case study period, December 21st at 3 PM, shadows from the proposed office building would extend about 80 feet northeast of the project site's north property line. These shadows would extend only as far as the streets and sidewalks and would not directly affect existing residential yards (see Figure 4.1-5B). The project would somewhat increase shade and reduce natural sunlight in the area during winter compared to existing conditions.

In summary, although the project represents infill development, it would permanently alter the existing visual character of the site and area compared to existing conditions, by intensifying development in contrast to the low-scale adjacent residential uses, removing vegetation, degrading views, and reducing vacant areas. This represents a significant impact to visual character and aesthetics.

Impact **Development of the project would result in significant visual/aesthetic impacts by altering the existing visual character of the site through the introduction of a new four-story building adjacent to existing low-scale residential development. To the extent that this change is considered a substantial degradation of the existing visual character/quality of the site and its surroundings, this represents a significant unavoidable impact.**

Mitigation

- 4.1-1 The project proponent shall submit detailed architectural plans, color palettes, and building materials to the City of Fresno Development and Resource Management Department. The plans shall be reviewed by the Planning Director prior to the issuance of any building permit; the review shall be substantially based on the extent to which the final architectural plans deviate from the building plans and building elevations illustrated on Figures 3-3 and 3-4.
- 4.1-2 In order to minimize tree removal and associated visual impacts, final landscaping plans shall retain existing mature trees to the extent possible. Final landscaping plans shall also provide enhanced landscape screening between the proposed building and adjacent residential uses and incorporate landscaping continuity between the project and adjacent Financial Center. Final landscaping plans shall be prepared in consultation with, and subject to the approval of, the City of Fresno Development and Resource Management Department.

Light and Glare

With the exception of windows, the project does not propose any significant sources of glare. The use of standard windows in the proposed four-story office building would not result in significant glare impacts.

Substantial portions of the overall project site are currently predominantly impacted by light and glare from the adjacent Fig Garden Shopping and Financial Centers and associated lighting sources. The majority of the project site is currently vacant and the only sources of night time light are street lamps and security lighting.

The proposed project would require night lighting on the outside of the building and within the parking areas for security purposes. The project would also utilize additional lighting in the parking garage; however, the garage would be enclosed and would not affect outdoor light levels. Additional night lighting sources on the project site, especially any unshielded light, could result in spillover light that could impact surrounding adjacent residential uses.

Impact **The project would create new sources of light that could significantly impact nighttime light levels in the area. This would represent a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.**

Mitigation

4.1-3 Exterior lighting shall be designed to be consistent with the standards of Illuminating Engineering Society of North America “Lighting for Exterior Environments” (1999) to reduce stray light. Prior to the approval of final design plans for the project, the applicant shall submit a lighting plan for review and approval by the City of Fresno Development and Resource Management Department to assure consistence with the above standard. The lighting plan shall indicate the amount, location, height, and intensity of outdoor lighting sources, limited to the minimum necessary for public safety, including the following requirements: 1) exterior lighting shall be directional; 2) glare from exterior lighting shall be adequately minimized; 3) the source of directional lighting shall not be directly visible; and 4) vegetative screening shall be considered, where appropriate, as a means of reducing development-related light and glare.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project’s incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. The proposed projects that are considered in this cumulative analysis are identified in Table 5-1 (see Section 5.0 CEQA Considerations). The project and cumulative developments are located within urbanized areas and would not significantly affect scenic views or vistas. Due to its density and height, the proposed office building could result in significant impacts to the visual character of the site and surrounding area. These impacts would be limited to the immediate project area. The other cumulative developments identified in Table 5-1 are distributed throughout the community and none are located in the immediate project vicinity or surrounding viewshed. In addition, the other cumulative projects are generally of a smaller scale and subject to the City’s design requirements, which would minimize adverse aesthetic effects.

In summary, although the localized aesthetic impacts of the proposed project are significant and unavoidable, the project's incremental effect on aesthetics, when combined with the effects of other projects on community aesthetics, does not result in a cumulatively considerable significant impact.

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4.2 AGRICULTURAL AND FOREST RESOURCES

Introduction

The following section evaluates the effects of the project on agricultural and forest resources. Given the location of the project on a previously developed infill site in an urban area, there is little potential for adverse impacts to agricultural and forest resources.

Setting

Agricultural Resources

Agricultural resources are afforded protection under various federal and state acts (such as the Williamson Act), programs, and local governance (General Plans, specific and other types of plans, zoning ordinance, etc.). Some of the agencies involved with stewardship of agricultural resources include the U.S. Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS), and the California Department of Conservation, Division of Land Resource Protection. In California, agricultural land is also given consideration under CEQA. According to Public Resources Code §21060.1, “agricultural land” means prime farmland, farmland of statewide importance, or unique farmland, as defined by the USDA land inventory and monitoring criteria, as modified for California.

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data that are used for analyzing impacts on California’s agricultural resources. The FMMP was established in 1982 in response to a critical need for assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California’s agricultural land resources. Under the FMMP, agricultural land is rated according to irrigation status and soil quality; the best quality land is called Prime Farmland. The FMMP produces Important Farmland Maps, which are a hybrid of resource quality (soils) and land use information.

According to the most recent Fresno County Important Farmlands Map (2006), the project site contains lands classified as “Urban and Built-Up Land.” The project site has been occupied with residential uses for several decades and is surrounded by urban developed. According to the California Department of Conservation Division of Land Resource Protection, “Urban and Built-Up” land is defined as residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment and water control structures.

Forest Resources

CEQA requires the evaluation of forest and timber resources where they are present. The project site is located in an urban area that has been historically used for residential purposes. The only forest resources on the site consist of primarily landscape trees. The site does not contain any forest land as defined in Public Resources Code section 12220(g), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g).

Regulatory Environment

City of Fresno General Plan. The General Plan contains several policies intended to protect agricultural resources. The project site, however, does not contain any agricultural resources and, therefore, the City's policies are not applicable. Refer to Table 4.9-2 of this EIR for additional discussion of the project's consistency with relevant General Plan policies.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- conflict with existing zoning for agricultural use, or a Williamson Act contract;
- conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- result in the loss of forest land or conversion of forest land to non-forest uses; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Impacts and Mitigation

Impacts to Agricultural Resources

There are no significant agricultural resources present on the project site, which consists of "Urban and Built-Up Land." Urban and Built-Up Land is not afforded protection under CEQA as it typically consists of land that is not suitable for agricultural uses. The project site has most recently been used for residential purposes, including a former apartment complex and single-family residences. Since the majority of the site is developed, there are no existing agricultural uses or operations within the project boundaries, nor in the immediate vicinity. The proposed project would not convert prime farmland, conflict with an existing agricultural use, or result in the conversion of existing farmland. Additionally, no Williamson Act contracted lands would be impacted due to the project. **The project would not impact agricultural resources.**

Impacts to Farmland Resources

The project site is located in an urban area that has been historically used for residential development. The only forest/timber resources on the site consist of landscape trees. The site does not contain any forest land as defined in Public Resources Code section 12220(g)), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g). **The project would not impact forest resources.**

Cumulative Impacts

Given the absence of agricultural and forest resources on the project site or in the vicinity of the project site, development of the mixed use project would not contribute to cumulative impacts to these resources. **The project would not, therefore, have a cumulatively considerable incremental effect on agricultural and forest resources, and the cumulative impact is less-than-significant.**

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4.3 AIR QUALITY & GREENHOUSE GAS

Introduction

This Air Quality section is based on an air quality analysis prepared for the project by Donald Ballanti, consulting meteorologist (August 2011). This analysis included an evaluation of regional emissions, local emissions, construction impacts, greenhouse gas (GHG) emissions, and climate change. The air quality/greenhouse gas evaluation is provided in Appendix B of this EIR.

Setting

The project is located in within the San Joaquin Valley Air Basin. The air basin is generally considered bowl-shaped, open to the north, and surrounded by mountain ranges on all other sides. The Sierra Nevada Mountains extend along the eastern boundary of the basin, the coastal ranges extend along the western boundary, and the Tehachapi Mountains run along the southern boundary. The mountains surrounding the air basin form natural horizontal barriers to the dispersion of air contaminants.

The air basin has an inland Mediterranean climate characterized by hot, dry summers and short, foggy winters. Sunlight is a catalyst in the formation of some air pollutants such as ozone, and the air basin averages more than 260 sunny days per year. Dominant airflows provide the driving mechanism for the transport and dispersion of air pollution. Marine air moves into the air basin from the San Joaquin River Delta. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and other Sierra passes, and into the Mojave Desert Air Basin portion of Kern County. As the wind moves through the valley, it mixes with locally-generated air pollutants, generally transporting air pollution from the north to the south in the summer and in a reverse flow in the winter.

Temperature inversions are an important component of regional air quality. Inversions occur when a layer of warm air aloft traps cooler air beneath. These inversions limit pollutants from dispersing vertically and the mountains surrounding the air basin can prohibit the pollutants from dispersing horizontally. Strong temperature inversions occur throughout the air basin in summer, fall, and winter. The result is a relatively high concentration of air pollution in the valley during inversions.

Pollutants of Concern

The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of certain air pollutants. Under this Act, the U.S. Environmental Protection Agency and the California Air Resources Board (CARB) have established ambient air quality standards for certain "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), particulate matter (PM₁₀, and PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). Secondary criteria pollutants include ozone (O₃), and fine particulate matter (aerosols). Other pollutants of concern are toxic air contaminants, asbestos, and greenhouse gases.

The criteria pollutants of greatest concern in the project area are ozone, PM₁₀, and PM_{2.5}. Although the air basin is in attainment of the federal and state CO standards, it is a pollutant of concern due to the potential for localized "hotspots." The following provides a summary of the pollutants of concern for the project area.

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include ROG and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. The effects of ROG and NO_x often occur a distance downwind of the emission sources and, therefore, ozone is considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

Reactive Organic Gases (ROG) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participate in atmospheric photochemical reactions. ROG consist of non-methane hydrocarbons and oxygenated hydrocarbons. There are no state or federal ambient air quality standards for ROG because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROG are also transformed into organic aerosols in the atmosphere, which contribute to higher PM₁₀ levels and lower visibility.

Nitrogen Oxides are formed during combustion of fossil fuels, when oxygen reacts with nitrogen. This occurs primarily in motor vehicle internal combustion engines, and in fossil fuel-fired electric utility facilities and industrial boilers. The pollutant NO_x is a concern because it is an ozone precursor. When NO_x and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight and heat to form ozone. NO_x can also be a precursor to PM₁₀ and PM_{2.5}.

Particulate Matter (PM₁₀ and PM_{2.5}) is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye, while others are so small that they can only be detected with an electron microscope. The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers (µm) in diameter pose the greatest problems, because they can get deep into lungs and bloodstream. The U.S. Environmental Protection Agency (EPA) health standards have been established for two categories of particulate matter:

- PM₁₀ – “inhalable coarse particles” with diameters larger than 2.5 micrometers and smaller than 10 micrometers.
- PM_{2.5} – “fine particles,” with diameters that are 2.5 micrometers and smaller.

Although the PM₁₀ standard is intended to regulate inhalable coarse particles that range from 2.5 to 10 micrometers in diameter, PM₁₀ measurements contain both fine and coarse particles. These particles come in many sizes and shapes and can be made up of hundreds of different chemicals. Some particles, known as primary particles, are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks, or fires. Others form in complicated reactions in the atmosphere from chemicals such as sulfur dioxides and nitrogen oxides that are emitted from power plants, industrial activity, and automobiles. These particles, known as secondary particles, make up most of the fine particle pollution in the U.S.

Carbon Monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not completely burned. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. Other non-road engines and vehicles (such as construction equipment and boats) contribute about 22 percent of all CO emissions nationwide.

Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are sources of CO indoors. CO is described as being a local pollutant since higher concentrations are found only close to the source. High CO levels develop primarily during winter, when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

Toxic Air Contaminants are defined as air pollutants that may cause or contribute to an increase in mortality or serious illness or that may pose a hazard to human health. Toxic air contaminants are usually present in minute quantities in the air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those toxic air contaminants that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

- Diesel Particulate Matter - CARB identified the PM emissions from diesel-fueled engines as a toxic air contaminant in August 1998 under California's toxic air contaminant program. In California, diesel engine exhaust has been identified as a carcinogen, known as diesel particulate (DPM). DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40 percent of the statewide total, with an additional 57 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources, contributing about three percent of emissions, include shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations.
- Asbestos - Asbestos refers to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the U.S. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers to the air and consequent exposure to the public. The project site is not in an area that is likely to contain naturally occurring asbestos.¹ Refer to **4.7 Hazards and Hazardous Materials** of this EIR for additional discussion of building asbestos.

Greenhouse Gas/Climate Change

Constituent gases of the earth's atmosphere called greenhouse gases play a critical role in the earth's radiation budget by trapping infrared radiation emitted from the earth's surface, which would otherwise escape into space. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration

¹ Based on review of maps from "A General Location Guide for Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos," (Department of Conservation, Division of Mines and Geology, 2000).

of these gases in the atmosphere beyond the level of naturally occurring concentrations, leading to a trend of unnatural changes to the earth's climate, known as global warming or climate change. Greenhouse gases are global pollutants, unlike ozone, carbon monoxide, particulate matter, and toxic air contaminants, which are pollutants of regional and local concern. California State law defines greenhouse gases as:

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur Hexafluoride

The overall approach to the GHG calculation in this analysis is based on the technical advisory of the Governor's Office of Planning and Research (OPR). According to OPR, the most common GHG generated by human activity is carbon dioxide, followed by methane and nitrous oxide. The last three of the six GHGs identified above are primarily emitted by industrial facilities. For the analysis in this EIR, only carbon dioxide, methane and nitrous oxide emissions will be evaluated. These primary GHGs are described below.

Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 35 percent. Carbon dioxide is the most widely emitted GHG.

Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the U.S., the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation.

Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production.

The United Nations Intergovernmental Panel on Climate Change (IPCC) has declared that worldwide, average temperatures are likely to increase by approximately 3° to 7°F by the end of the this century. However, a global temperature increase does not translate to a uniform increase in temperature in all locations on the earth. Regional climate changes are dependent on multiple variables. One region of the earth may experience increased temperatures, greater incidents of drought, and similar warming effects, whereas another region may experience a relative cooling. According to the IPCC's Working Group II Report website, climate change impacts to North America may include diminishing snowpack, increasing evaporation, exacerbated shoreline erosion, exacerbated inundation from sea level rising, increased risk and frequency of wildfire, increased risk of insect outbreaks, increased experiences of heat waves, and rearrangement of ecosystems, as species and ecosystem zones shift northward and to higher elevations.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone

days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Greenhouse Gas Emissions Inventory and Trends

In 2004, total worldwide GHG emissions were estimated to be 20,135 million metric tons of carbon dioxide equivalent (MMTCO_{2e}), excluding emissions/removals from land use, land use change, and forestry. GHG emissions in the U.S. were 7,074.4 MMTCO_{2e}. In 2004, California produced 500 MMTCO_{2e}, including imported electricity and excluding combustion of international fuels and carbon sinks or storage, which is approximately seven percent of U.S. emissions. The largest source of greenhouse gas in California is transportation, contributing 41 percent of the State's total greenhouse gas emissions. Electricity generation is the second-largest source, contributing 22 percent of the State's greenhouse gas emissions. The inventory for California's greenhouse gas emissions between 2000 and 2006 is presented in Appendix B.

Regulatory Environment

Federal

As stated previously, the Federal Clean Air Act (CAA) establishes federal air quality standards and sets deadlines for their attainment. The CAA identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and attainment, and incorporates more stringent sanctions for failure to meet interim milestones. The EPA handles global, international, national, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance in air pollution programs, and sets federal standards. Federal ambient air quality standards are summarized in Table 4.31.

State

The State Implementation Plan for the State of California is administered by the California Air Resources Board (CARB), which has overall responsibility for statewide air quality maintenance and air pollution prevention. A State Implementation Plan is prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards. The State Implementation Plan incorporates individual federal attainment plans for regional air districts. Federal attainment plans prepared by each air district are sent to CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring) control measures and strategies and enforcement mechanisms.

CARB also administers California Ambient Air Quality Standards for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants are the six federal criteria pollutants as well as visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. Visibility-reducing particles are suspended particulate matter. State ambient air quality standards are summarized in Table 4.3-1.

CARB published the Air Quality and Land Use Handbook: A Community Health Perspective in 2005. This document provides information and guidance on the siting of sensitive receptors in relation to sources of toxic air contaminants. The sources of toxic air contaminants identified in

the Land Use Handbook are high-traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gasoline dispensing facilities. If the project involves siting a sensitive receptor or source of toxic air contaminant discussed in the Land Use Handbook, siting mitigation may be added to avoid potential land use conflicts, thereby reducing the potential for health impacts to the sensitive receptors.

**Table 4.3-1
Federal and State Ambient Air Quality Standards**

Air Pollutant	Averaging Time	California Standard	Federal Standard
Ozone (O ₃)	1 hour	0.09 ppm	—
	8 hour	0.070 ppm	0.075 ppm
Respirable particulate matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³
	Mean	20 µg/m ³	—
Fine particulate matter (PM _{2.5})	24 hour	—	35 µg/m ³
	Mean	12 µg/m ³	15.0 µg/m ³
Carbon monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen dioxide (NO ₂)	1 hour	0.18 ppm	—
	Mean	0.030 ppm	0.053 ppm
Sulfur dioxide (SO ₂)	1 hour	0.25 ppm	0.10 ppm
	24 hour	0.04 ppm	0.14 ppm
	Mean*	—	0.030 ppm
Lead	30-day	1.5 µg/m ³	—
	Rolling 3-month	—	0.15 µg/m ³ **
	Quarter	—	1.5 µg/m ³
Sulfates	24 hour	25 µg/m ³	No Federal Standard
Hydrogen sulfide	1 hour	0.03 ppm	
Vinyl chloride**	24 hour	0.01 ppm	
Visibility-reducing particles	8 hour	Extinction coefficient of 0.23 per kilometer, visibility of 10 miles or more from particles when relative humidity is less than 70%.	
Abbreviations: ppm = parts per million µg/m ³ = micrograms per cubic meter 30-day = 30-day average Quarter = Calendar quarter Mean = Annual Arithmetic Mean Source: California Air Resources Board, Ambient Air Quality Standards (9/8/10) http://www.arb.ca.gov/research/aaqs/aaqs2.pdf .			

Three terms describe whether an air basin is exceeding or meeting federal and state standards: Attainment, Nonattainment, and Unclassified. Areas are designated attainment or nonattainment on a per-pollutant basis. An air basin is designated as “attainment” if all the standards for an air pollutant are met. If there is inadequate or inconclusive data to make a definitive attainment designation for a pollutant, the air basin is considered “unclassified.” The current attainment designations for the project area are shown in Table 4.3-2.

As described above, a State Implementation Plan is a federal requirement; each state prepares a plan to describe existing air quality conditions and measures to attain and maintain the National Ambient Air Quality Standards. In addition, state ozone standards have planning requirements. State PM₁₀ standards have no attainment planning requirements, although air districts must demonstrate that all measures feasible for the area have been adopted.

Table 4.3-2 Air Basin Attainment Status		
Pollutant	Designation Status	
	Federal	State
Ozone – 1-hour	No federal standard	Nonattainment/Severe
Ozone – 8-hour	Nonattainment/Extreme	Nonattainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen dioxide	Attainment/Unclassified	Attainment
Sulfur dioxide	Attainment/Unclassified	Attainment
Lead	No Designation	Attainment
Sulfates	No federal standards	Attainment
Hydrogen sulfide		Unclassified
Visibility-reducing particles		Unclassified
Source: San Joaquin Valley Air Pollution Control District, Air Quality Standards and Valley Attainment Status, http://www.valleyair.org/aqinfo/attainment.htm , accessed August 9, 2011.		

Regional

The air pollution control agency for the air basin is the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for regulating emissions primarily from stationary sources, certain area-wide sources, and indirect sources. The SJVAPCD maintains air quality monitoring stations throughout the basin. The SJVAPCD, in coordination with the eight countywide transportation agencies, is also responsible for developing, updating, and implementing the Air Quality Plans (AQPs) for the basin. In addition, the SJVAPCD has prepared the “Guide for Assessing and Mitigating Air Quality Impacts,” which sets forth recommended thresholds of significance, analysis methodologies, and provides guidance on mitigating significant impacts.

The San Joaquin Valley Air Basin is designated as nonattainment for state and federal health-based air quality standard for ozone. To meet CAA requirements for the one-hour ozone

standard, the SJVAPCD adopted an Extreme Ozone Attainment Demonstration Plan in 2004, with an attainment date of 2010. EPA revoked the federal 1-hour ozone standard and replaced it with an 8-hour standard. Although EPA revoked the 1-hour ozone standard effective June 15, 2005, the requirement to submit a plan for that standard remained in effect for the San Joaquin Valley. On June 30, 2009, EPA proposed approval and partial disapproval of San Joaquin Valley's 2004 Extreme Ozone Attainment Plan for 1-hour ozone. EPA proposed to approve the plan revisions for the San Joaquin Valley as meeting applicable Clean Air Act requirements except for the provision addressing the reasonably available control technology requirements that the State withdrew. The San Joaquin Valley's 2004 Extreme Ozone Attainment Demonstration Plan prepared by the San Joaquin Valley Air Pollution Control District, shows that the area will have in place the controls necessary to meet the 1-hour ozone standard by the Clean Air Act deadline of 2010. On March 8, 2010 the EPA approved San Joaquin Valley's 2004 Extreme Ozone Attainment Plan for 1-hour ozone.

The air basin is classified as serious nonattainment for the federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the SJVAPCD's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be unfeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an "extreme nonattainment" deadline of 2026. At its adoption of the 2007 Ozone Plan, the SJVAPCD also requested a reclassification to extreme nonattainment. CARB approved the plan in June 2007.

State ozone standards do not have an attainment deadline but require implementation of all feasible measures to achieve attainment at the earliest date possible.

The air basin was also designated nonattainment of state and federal health-based air quality standards for PM_{10} . To meet Clean Air Act requirements for the PM_{10} standard, the SJVAPCD adopted a PM_{10} Attainment Demonstration Plan (Amended 2003 PM_{10} Plan and 2006 PM_{10} Plan), which has an attainment date of 2010.

The SJVAPCD has adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation. The 2007 PM_{10} Plan contains modeling demonstrations that show the air basin will not exceed the federal PM_{10} standard for 10 years after the expected EPA re-designation, monitoring, and verification measures, and a contingency plan. Even though the EPA revoked the federal annual PM_{10} standard, the 2007 PM_{10} Maintenance Plan addresses both the annual and 24-hour standards because both standards were included in the EPA-approved State Implementation Plan. EPA finalized the determination that the air basin attained the PM_{10} standards on October 17, 2007, effective October 30, 2007. On September 25, 2008, EPA re-designated the air basin as attainment for the federal PM_{10} standard and approved the PM_{10} Maintenance Plan.

The air basin is also designated nonattainment for the new federal $PM_{2.5}$ annual standard. The $PM_{2.5}$ Plan demonstrates that the air basin will attain the 1997 federal standard by 2014 and make progress toward attaining the 2006 federal 24-hour standard. The SJVAPCD estimates that attainment plans for the federal 2006 standard will be required by 2012 or 2013 with an attainment deadline of 2020. Measures contained in the 2003 PM_{10} Plan will also help reduce $PM_{2.5}$ levels and will provide progress toward attainment until new measures are implemented for the $PM_{2.5}$ Plan, if needed. State PM_{10} standards have no attainment planning requirements, but air districts must demonstrate that all measures feasible for the area have been adopted.

The SJVAPCD rules and regulations that apply to this project include the following:

- SJVAPCD Rule 2201 – New and Modified Stationary Source Review.
- SJVAPCD Rule 3180 – Administrative Fees for Indirect Source Review (ISR). The purpose of this rule is to recover the SJVAPCD’s costs for administering the requirements of Rule 9510.
- SJVAPCD Rule 4002 - National Emissions Standards for Hazardous Air Pollutants. The purpose of the rule is to incorporate the National Emission Standards for Hazardous Air Pollutants from Part 61, Chapter I, Subchapter C, Title 40, Code of Federal Regulations and the National Emission Standards for Hazardous Air Pollutants for Source Categories from Part 63, Chapter I, Subchapter C, Title 40, Code of Federal Regulations to protect the health and safety of the public from hazardous air pollutants, such as asbestos.
- SJVAPCD Rule 4102 – Nuisance. The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials.
- SJVAPCD Rule 4601 – Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling.
- SJVAPCD Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641.
- SJVAPCD Regulation VIII – Fugitive PM₁₀ Prohibitions. Rule 8011-8081 are designed to reduce PM₁₀ emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc.
- SJVAPCD Rule 9510 – Indirect Source Review. The purpose of this rule is to fulfill the SJVAPCD's emission reduction commitments in the PM₁₀ and Ozone Attainment Plans, achieve emission reductions from the construction and use of development projects through design features and on-site measures, and provide a mechanism for reducing emissions from the construction of and use of development projects through off-site measures. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two. This project will submit an Air Impact Assessment application in accordance with Rule 9510’s requirements.

Climate Change/Greenhouse Gas Regulatory Environment

International and Federal

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Industrialized countries are required to reduce their greenhouse gas emissions by an average of five percent below their 1990 levels by 2012. In 1998, Vice President Al Gore symbolically signed the Protocol; however, in anticipation of the signing, the U.S. Senate approved a non-binding “Sense of the Senate” resolution in July 1997 that expressed opposition to the treaty’s provisions, most notably the disparity in greenhouse gas emissions reduction obligations between industrialized nations and developing nations. In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol.

In April 2009, the U.S. EPA published a Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act. The EPA is proposing to find that the current and projected concentrations of the mix of the six key greenhouse gases in the atmosphere threaten the public health and welfare of current and future generations. The EPA is further proposing to find that the combined emissions of carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and the threat of climate change.

State

Title 24. Although it was not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. The 2008 Standards went into effect January 1, 2010, and supersede the 2005 Standards. Projects that apply for a building permit on or after this date must comply with the 2008 Standards. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

Assembly Bill (AB) 1493. California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light-duty trucks. Regulations adopted by CARB would apply to 2009 and later-model-year vehicles. CARB estimates that the regulation would reduce climate change emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. However, the regulation was stalled by automaker lawsuits and by the EPA’s refusal to grant California an implementation waiver. However, President Obama asked the EPA to review its denial of the waiver. The EPA granted California’s waiver on June 30, 2009, enabling California to enforce AB 1493.

Executive Order S-3-05. California Governor Arnold Schwarzenegger signed Executive Order S-3-05 on June 1, 2005, which established the following reduction targets for greenhouse gas emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. To meet these targets, the Governor directed the Secretary of the California EPA to

lead a Climate Action Team (CAT) made up of representatives from the Business, Transportation, and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the CARB; the Energy Commission; and the Public Utilities Commission. The CAT's Report to the Governor in 2006 contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met.

Executive Order S-01-07. Executive Order S-01-07 was signed by the Governor on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It also requires that a Low Carbon Fuel Standard for transportation fuels be established for California.

Senate Bill (SB) 97. California Senate Bill 97 was passed in August 2007 and added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." California Natural Resources Agency adopted these amendments on December 30, 2009, and they took effect March 18, 2010, after review by the Office of Administrative Law and filing with the Secretary of State for inclusion in the California Code of Regulations.

The revisions include a new section (Sec. 15064.4) that specifically addresses the potential significance of GHG emissions. Section 15064.4 calls for a "good-faith effort" to "describe, calculate or estimate" GHG emissions; Section 15064.4 further states that the analysis of the significance of any GHG impacts should include consideration of the extent to which the project would increase or reduce GHG emissions; exceed a locally applicable threshold of significance; and comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." The guidelines also state that a project may be found to have a less-than-significant impact on GHG emissions if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (Sec. 15064(h)(3)). However, the guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions.

Assembly Bill (AB) 32. In 2006, the California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. CARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases. CARB approved the 1990 greenhouse gas emissions level of 427 MMTCO_{2e} on December 6, 2007. Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO_{2e}.

CARB approved the Climate Change Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan outlines actions to obtain the goal set out in AB 32 of reducing emissions to 1990 levels by the year 2020. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance

public health”. The measures in the Scoping Plan will be in place by 2012. The Scoping Plan’s recommendations for reducing greenhouse gas emissions to 1990 levels by 2020 providing for emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, and Voluntary Early Actions and Reductions. AB 32 did not amend CEQA or establish regulatory standards to be applied to new development or environmental review of projects within the State.

Senate Bill (SB) 375. California Senate Bill 375 passed on August 30, 2008 and was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of greenhouse gas emissions, which emits over 40 percent of the total greenhouse gas emissions in California. SB 375 states that “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: 1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing greenhouse gas emissions, 2) aligns planning for transportation and housing, and 3) creates specified incentives for the implementation of the strategies.

Executive Order S-13-08. Executive Order S-13-08 indicates that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the order, in December 2009, the California Natural Resources Agency released its 2009 California Climate Adaptation Strategy. The Strategy is the “...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Local

Climate Change Action Plan. On August 21, 2008, the SJVAPCD Governing Board approved a proposal, called the Climate Change Action Plan, to begin a public process to bring together stakeholders, land use agencies, environmental groups, and business groups, and conduct public workshops to develop comprehensive policies for CEQA guidelines and a carbon exchange bank, and voluntary greenhouse gas emissions mitigation agreements for the Governing Board’s consideration.

SJVAPCD CEQA Greenhouse Gas Guidance. On December 17, 2009, the SJVAPCD Governing Board adopted “Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA” and the policy, “District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.” The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project specific greenhouse gas emissions have on global climatic change. The SJVAPCD found the effects of project-specific emissions to be cumulative, and without mitigation, that their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their greenhouse gas emissions, whether through project design elements or mitigation.

The SJVAPCD’s approach is intended to streamline the process of determining if project-specific greenhouse gas emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be

determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document.

Best performance standards (BPS) would be established according to performance-based determinations. Projects complying with BPS would not require specific quantification of greenhouse gas emissions and would be determined to have a less than significant cumulative impact for greenhouse gas emissions. Projects not complying with BPS would require quantification of greenhouse gas emissions and demonstration that greenhouse gas emissions have been reduced or mitigated by 29 percent, as targeted by CARB's AB 32 Scoping Plan. Furthermore, quantification of greenhouse gas emissions would be required for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards.

For stationary source permitting projects, best performance standards are "The most stringent of the identified alternatives for control of greenhouse gas emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." For development projects, best performance standards are "Any combination of identified greenhouse gas emission reduction measures, including project design elements and land use decisions that reduce project specific greenhouse gas emission reductions by at least 29 percent compared with business as usual." The SJVAPCD proposes to create a list of all approved Best Performance Standards to help in the determination as to whether a proposed project has reduced its greenhouse gas emissions by 29 percent.

San Joaquin Valley Carbon Exchange. The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. While the Climate Change Action Plan indicated that the greenhouse gas emission reduction program would be called the San Joaquin Valley Carbon Exchange, SJVAPCD staff has proposed to incorporate a method to register voluntary greenhouse gas emission reductions into its existing Rule 2301 - Emission Reduction Credit Banking through amendments of the rule. In its present draft form, the amendments to Rule 2301 would provide a mechanism to preserve voluntary, high-quality greenhouse gas emission reductions. The draft rule will allow the use of registered greenhouse gas emission reductions for any purpose and will not impose any restrictions on their use. The draft amendments to Rule 2301 will allow greenhouse gas emission reductions that fall into two different categories to be registered with the SJVAPCD: non-protocol greenhouse gas emission reductions and protocol-based greenhouse gas emission reduction credits.

2025 Fresno General Plan. The City of Fresno General Plan contains numerous environmental policies intended to address issues associated with air quality. The Air Quality Element Update was adopted in 2009, which added new objectives, policies, and measures addressing GHG emissions and global climate change. An analysis of the air quality policies applicable to the proposed project is provided in Table 4.9-2 of this EIR.

Existing Air Quality

CARB and SJVAPCD operate air monitoring stations throughout the air basin. The closest monitoring station to the project site is the Fresno First Street site. Table 4.3-3 presents the monitoring data for the Fresno First Street site from 2008 through 2010. Ambient air pollution concentrations in the project area regularly exceeded the state 1-hour ozone standard and the federal 8-hour standard in the last three years. In the same timeframe, the project area exceeded the state daily PM₁₀ standard and the federal PM_{2.5} standard. However, the project area did not

exceed the federal or state CO standards, nor did the project area exceed the federal PM₁₀ standard.

Sensitive Receptors/Nearby Sources

Certain populations, such as children, the elderly, and persons with preexisting respiratory or cardiovascular illness, are particularly sensitive to the health impacts of air pollution. For purposes of CEQA, the SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The nearest sensitive receptors to the site are existing residences south, east, and north of the project site. The proposed office use is not classified as a sensitive land use.

The California Air Resources Board's Community Health Air Pollution Information System was used to determine that no major stationary sources of criteria or toxic air pollutants are located near the proposed project site. In addition, the project site is not located within 500 feet of any freeways.

Table 4.3-3 Air Quality Monitoring Summary				
Pollutant	Averaging Time (Units)	2008	2009	2010
Ozone	Maximum 1 Hour (ppm)	0.157	0.121	0.127
	Days > State Standard (0.09 ppm)	44	36	16
	Maximum 8 Hour (ppm)	0.132	0.104	0.107
	Days > 2008 Federal Standard (0.075 ppm)	62	51	26
	Days > State Standard (0.07 ppm)	86	73	51
Nitrogen dioxide (NO ₂)	Annual Average (ppm)	0.016	0.014	0.013
	Max 1 Hour (ppm)	0.070	0.068	0.077
	Days > State Standard	0	0	0
Carbon monoxide (CO)	Maximum 1 Hour (ppm) ¹	3.34	2.96	2.90
	Maximum 8 Hour (ppm)	2.34	2.07	2.03
	Days > State Standard (9.0 ppm)	0	0	0
	Days > Federal Standard (9 ppm)	0	0	0
Fine particulate matter (PM ₁₀)	State Annual Average (20 µg/m ³)	35.1	30.9	25.9
	Maximum 24 Hour (µg/m ³) ²	77.7	71.9	88.6
	Days > State Standard (50 µg/m ³)	15	8	5
	Days > Federal Standard (150 µg/m ³)	0	0	0
Ultra fine particulate matter (PM _{2.5})	Annual Average (µg/m ³)	17.3	15.1	13.0
	Maximum 24 Hour (µg/m ³)	79.5	82.3	58.3
	Est. Days > Federal Standard (35 µg/m ³)	50.9	35.8	21.7

Table 4.3-3 Air Quality Monitoring Summary				
Pollutant	Averaging Time (Units)	2008	2009	2010
<p>Notes: > = exceed ppm = parts per million Exceedances are listed in bold.</p> <p>¹CARB does not report 1-hour average CO concentrations in its database, only 8-hour CO concentrations. Therefore, the 1-hour CO concentration was derived by dividing the 8-hour concentration by 0.7.</p> <p>Source: California Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2010. (http://www.arb.ca.gov/adam/cgi-bin/adamtop/d2wstart).</p>				

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- conflict with or obstruct implementation of the applicable air quality plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial pollutant concentrations; or
- create objectionable odors affecting a substantial number of people.

Appendix G states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. SJVAPCD guidance provides that a project would have a significant impact if:

- All control measures in compliance with the requirements of Regulation VIII-Fugitive Dust Prohibition are not incorporated into project design or implemented during construction;
- Construction-related emissions of ROG or NO_x exceed 10 tons per year;
- Operational regional emissions of ROG or NO_x exceed 10 tons per year;
- Project results in a carcinogenic risk (i.e., risk of contracting cancer) greater than 10 in one million and/or a non-carcinogenic Hazard Index (HI) of 1 for the Maximally Exposed Individual (MEI), as recommended in the SJVAPCD's Guidance for Air Dispersion Modeling; or
- The project would locate receptors near an existing odor source where one confirmed complaint per year (averaged over a three year period), or three unconfirmed complaints per year (averaged over a three year period) have been experienced by existing receptors as close as the project to the odor source; or by existing receptors in the vicinity of a similar facility

considering distance, frequency, and odor control, where there is currently no nearby development and for proposed odor sources near existing receptors.

For greenhouse gas emissions, in accordance with CEQA Guidelines a project impact would be considered significant if the project would:

- generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The first criteria may be evaluated by performing a direct calculation of the GHG emissions from the project. The SJVAPCD adopted a guidance document on December 17, 2009, for assessing GHG emissions for projects in the SJVAB, but concluded that a numerical GHG significance threshold was not supported by current scientific knowledge. Instead, the SJVAPCD guidance recommends compliance with best performance standards to reduce GHG emissions or demonstrate that a project results in a reduction of GHG emissions by 29% compared to an established baseline. Accordingly, while GHG emissions can be quantified, there is no significance threshold relevant to the proposed project that has been adopted by any federal, state, or local agency to evaluate the significance of the project under CEQA.

The SJVAPCD adopted the “Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA” in late 2009. According to the guidance, while other agencies have proposed draft numerical thresholds for GHG emissions, notably CARB, the Bay Area Air Quality Management District, and the South Coast Air Quality Management District, SJVAPCD staff concluded that “the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climatic features. Therefore, the SJVAPCD did not establish a numerical threshold for GHG emissions for land use projects. The SJVAPCD guidance recommends the use of BPS to assess the significance of GHG emissions. The SJVAPCD expects that compliance with the recommended BPS would reduce a project’s GHG emissions by a target of 29 percent or more, compared an established baseline. The 29 percent reduction target is based on the goal of AB 32, which is to reduce the state’s GHG emissions to 1990 levels by 2020.

The SJVAPCD supports the use of performance based standards, but also recognizes that performance standards have not been developed for all sources of GHG emissions. The SJVAPCD guidance provides BPS for sources of GHG emissions from land-use developments that are typical of most projects. The process for establishing source performance standards is expected to be ongoing, as mitigation measures and GHG emission reduction techniques will evolve and improve over time.

As an alternative to complying with the SJVAPCD’s recommended BPS, projects that demonstrate a reduction of 29 percent in GHG emissions from the established baseline would also be considered to result in a less-than-significant impact under CEQA. Based on the above, the project’s significance with respect to GHG emissions and global climate change will be assessed based on project features and GHG reduction measures that are consistent with the SJVAPCD’s recommended BPS and the 29 percent reduction target as compared with and established Business as Usual (BAU) baseline.

Impacts and Mitigation

The air quality analysis prepared for the project by Donald Ballanti utilized various data sources and air quality models. Traffic data from the traffic impact study prepared for the project by TPG Consulting, Inc. was used to model operational motor vehicle emissions including carbon monoxide hotspots. Annual increases in vehicular and area emissions associated with the project were estimated using the URBEMIS 2007 (Version 9.2.4) computer program. Construction emissions for the project were also modeled using URBEMIS. Carbon dioxide emissions were estimated using the URBEMIS-2007 output and other methods to estimate non-vehicular emissions.

Consistency with Air Quality Plan

The SJVAPCD has prepared attainment plans for the SJVAB in order to demonstrate achievement of the state and federal ambient air quality standards for ozone, PM₁₀, and PM_{2.5}. The attainment plans are based on, among other things, future growth in the SJVAB set forth in adopted general plans.

The project would replace the 44 vacant apartment units on the project site with a 104,593 square foot office building. This land use change would not conflict with or obstruct implementation of applicable air quality plans. The regional emissions associated with the project area are evaluated below.

The project would not conflict with or obstruct implementation of the applicable air quality plan

Construction Impacts

Construction of the project would generate localized emissions of dust and diesel exhaust that could result in temporary impacts to adjacent land uses. Construction impacts include fugitive dust and other particulate matter, as well as exhaust emissions generated by the demolition of existing buildings, earthmoving activities, and operation of grading equipment during site preparation. Construction emissions can be caused by both on- and offsite activities. Onsite emissions principally consist of exhaust emissions from heavy-duty construction equipment, motor vehicle operation, and fugitive dust from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles, as well as worker traffic, but also include road dust.

Construction equipment used on the project site would generate exhaust emissions of NO_x, ROG, PM₁₀, PM_{2.5}, CO, and minor amounts of sulfur dioxide. Construction activities occur in discrete phases, each of which has a unique mix of equipment. Therefore, the construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and the prevailing weather conditions. The URBEMIS program was run assuming the applicant's estimated construction schedule of 16.5 months. For the purposes of this EIR, it was assumed that construction would begin on February 12, 2012 and would be completed by July 2013. The unmitigated analysis includes compliance with SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions). Compliance with Regulation VIII is required; therefore, the following measures were included in the analysis:

- Apply soil stabilizers to inactive areas
- Replace ground cover in disturbed areas quickly
- Water exposed surfaces twice daily

- Stabilize soil in equipment loading/unloading areas
- Reduce speed on unpaved roads to less than 15 miles per hour
- Manage haul road dust by watering twice daily

Maximum annualized construction emissions are shown below in Table 4.3-4. As presented in the table, the project's emissions during construction would not exceed the SJVAPCD's regional thresholds; therefore, construction impacts are considered less-than-significant.

	Emissions (tons)			
	ROG	NO_x	PM₁₀	PM_{2.5}
Project Emissions	2.64	2.35	0.76	0.33
SJVAPCD Threshold	10	10	-	-
Significant?	No	No	-	-

Although construction emissions are less-than-significant, SJVAPCD requires the following measures to be implemented during construction. The proposed project shall include in all construction contracts the measures specified in SJVAPCD Regulation VIII to reduce fugitive dust impacts. These measures include, but are not limited to, the following:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purpose, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing the application of water or by presoaking.
- When materials are transported off site, all materials shall be covered, effectively wetted to limit visible dust emissions, or at least 6 inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, storage piles shall be effectively stabilized of fugitive dust emissions by utilizing sufficient water of chemical stabilizer/suppressant

- Equipment used during grading activities shall include one of the following:
 - Diesel oxidation catalysts or other amendment to achieve a 15 percent reduction in NOx emissions
 - An engine tier of three or higher
 - An engine of year 2006 or newer
- During all phases of project construction, construction equipment shall be properly maintained in accordance with the manufacturer's specifications; maintenance shall include proper tuning and timing of engines. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction and subject to inspection by the SJVAPCD.
- During all phases of project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use.
- During all phases of project construction, on-site electrical hookups shall be provided for electric construction tools, including saws, drills, and compressors, to eliminate the need for diesel-powered electric generators.

The project's emissions during construction would not exceed the SJVAPCD's regional thresholds with implementation of SJVAPCD's standard dust abatement measures; therefore, construction air quality impacts would be less-than-significant impact.

Toxic Air Contaminant Emissions

The California Air Resources Board has identified particulate emissions from diesel fueled engines as a Toxic Air Contaminant (TAC). During construction, various diesel-powered vehicles and equipment would be in use on the project site. The SJVAPCD CEQA guidance recommends that a Health Risk Assessment be prepared for permanent sources of TAC emissions, such as truck loading docks and emergency diesel generators. The project would not involve any permanent operational sources of TACs.

Small amounts of diesel particulate would be released during some phases of construction. The bulk of diesel engine use on the project site would occur during the initial phases of construction, such as demolition and site preparation. These construction phases would occur over a period of about 2 – 3 months.

Health risks from TACs are a function of both concentration and duration of exposure. Thresholds of significance for TACs are based on lifetime exposures assumed to be 70 years. Construction diesel emissions are temporary, affecting an area for a period of weeks. Additionally, construction related sources are mobile and transient in nature. Because of the relatively short duration of exposure at any one location, the SJVAPCD guidance and procedures do not recommend that Health Risk Assessments be prepared for normal construction activities, and the District does not have any screening procedures to evaluate construction health effects. Given the short duration of construction emissions of diesel particulate, health risks from construction emissions of diesel particulate would be less-than-significant.

The project's construction and operation would have a less-than-significant impact with respect to TAC emissions.

Operational Impacts

Operational or long-term emissions occur over the life of the project. Operational emissions include both mobile and area source emissions. Area source emissions are generated by consumer products, heaters that consume natural gas, gas-powered landscape equipment, and architectural coatings (e.g., paint). Mobile emissions are generated from motor vehicles, which are often the largest single, long-term source of air pollutants from development projects.

Table 4.3-5 shows the new auto and area source emissions of regional pollutants that would result from the project, based on output from the URBEMIS2007 computer program. Also shown are the SJVAPCD thresholds of significance. As shown in the table, the operational emissions of the project at full buildout would not exceed the thresholds of significance for ROG and NO_x, resulting in a less-than-significant regional air quality impact.

The project would have a less-than-significant regional air quality impact.

Table 4.3-5 Operational Emissions (2013)				
Source	Emissions (tons/year)			
	ROG	NO_x	PM₁₀	PM_{2.5}
Area Source Emissions	0.13	0.13	0.01	0.01
Vehicular Emissions	1.79	3.12	1.78	0.41
Total	1.92	3.25	1.79	0.42
SJVAPCD Threshold	10	10	-	-
Significant?	No	No	-	-

Local CO Concentrations

A project can violate an air quality standard or contribute substantially to an existing or projected air quality violation through the generation of vehicle trips. New vehicle trips add to carbon monoxide (CO) concentrations near streets providing access to the site. CO concentrations are highest near intersections of major roads.

The SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts* indicate that if neither of the following criteria is met at all intersections affected by the development project, the project can be determined to have no potential to violate the CO standard:

- the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F, and
- the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

The traffic impact study prepared for the proposed project forecasts that with mitigation, all roadway segments and intersections studied would operate at LOS D or better with approved growth and the addition of project traffic. However, in the cumulative scenario (2030), the intersection level of service would drop to LOS E or worse at two intersections: 1) Bullard

Avenue at Palm Avenue and 2) Maroa Avenue at Shaw Avenue. These intersections would have the highest potential for creating a CO hotspot.

Using the CALINE4 model and the statewide CO protocol developed by Caltrans, potential CO hotspots were analyzed at the two worst-case intersections under existing conditions and with the addition of traffic from the proposed project and cumulative scenario (2030). As shown in Table 4.3-6, the estimated 1-hour and 8-hour average CO concentrations are below the state and national ambient air quality standards. No CO hotspots are anticipated as a result of traffic-generated emissions by the project or in combination with future development.

Intersection	Existing (2011)		Existing + Project + Approved (2011)		Cumulative + Project (2030)	
	1-hr	8-hr	1-hr	8-hr	1-hr	8-hr
Bullard Ave/Palm Ave	5.3	3.7	5.4	3.8	3.2	2.2
Maroa Ave/Shaw Ave	6.6	4.6	6.8	4.8	3.5	2.5
Ambient Standard	20.0	9.0	20.0	9.0	20.0	9.0
Significant	No	No	No	No	No	No

The CALINE-4 model was also applied to the two worst-case intersections for cumulative plus project traffic conditions in the year 2030. Even with increased traffic volumes and congestion, cumulative concentrations are below current levels due to the gradual reduction in per-mile emission rates from vehicles as older, more polluting vehicles are replaced by newer, cleaner vehicles. Therefore, the mobile emissions of CO from the project are not anticipated to contribute substantially to an existing or projected air quality violation of CO either singly or cumulatively. The proposed project would have no potential to create a violation of the CO standards, and would have a less-than-significant impact on CO concentrations.

The proposed project would have no potential to create a violation of the CO standards, and would have a less-than-significant impact on CO air quality.

Odor Impacts

Two situations create a potential for odor impacts: 1) when a new odor source is located near an existing sensitive receptor, and 2) when a new sensitive receptor locates near an existing source of odor. SJVAPCD has determined the common land use types that are known to produce odors in the air basin, which include wastewater treatment facilities, chemical manufacturing plants, painting/coating operations, feed lots/dairies, composting facilities, landfills, and transfer stations.

Since the proposed project would not include any of the above land uses, it would not expose sensitive receptors to objectionable odors. In addition, the project is not considered a new sensitive receptor. The project, therefore, would have a less-than-significant impact related to odor.

The proposed project would have a less-than-significant impact associated with odors.

Greenhouse Gas Emissions Evaluation

Operational or long-term emissions sources of GHG from the proposed project include the following:

- Motor vehicles and trucks
- Natural gas - exhaust from natural gas usage
- Offsite electricity generation
- Water transport and wastewater treatment (i.e., electricity required to transport and treat water and wastewater for the project)
- Solid waste emissions from decomposition in a landfill
- Area sources such as maintenance equipment exhaust emissions

Please note that impacts associated with GHG are considered cumulative, as there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008).

As discussed in the regulatory section, the SJVAPCD's guidance for addressing GHG emissions is to establish a list of GHG emission reduction measures with pre-quantified GHG emission reduction effectiveness. These best performance standards have not yet been established. Projects implementing BPS would not require quantification of GHG emissions. In the absence of a definition of BPS, a project would be required to quantify project specific GHG emissions and demonstrate that project specific GHG emissions would be reduced or mitigated by at least 29% compared to Business as Usual conditions. Projects achieving at least a 29% GHG emission reduction would be determined to have a less-than-significant individual and cumulative impact for GHG.² Business as Usual, as established by the California Air Resources Board, is a projected emissions inventory for 2020, including increases in emissions caused by growth without any GHG reduction measures.

The 29% emission reduction may be achieved through any combination of GHG reduction measures, including reductions achieved as a result of changes in building and appliance standards occurring since the 2002-2004 baseline period. According to the air quality study, it is appropriate to include standards and regulations that reduce emissions by the Scoping Plan's 2020 target year because the energy used by the project purchased from the grid would result in substantially lower emissions as the renewable energy portfolio standard is implemented over time. GHG emissions from motor vehicles associated with the project would also decline over time as state and federal fuel efficiency standards are implemented. BAU emissions for the project are shown in Table 4.3-7.

² San Joaquin Valley Air Pollution Control District, *Addressing Greenhouse Gas Emissions Impacts Under the California Environmental Quality Act*, December 17, 2009.

Table 4.3-8 summarizes assumed reductions in greenhouse gas emissions from state regulations and AB32 measures. The project incorporates a number of factors that would reduce GHG emissions. The SJVAPCD's Interim GHG Emission Reduction Calculator was applied to the project to estimate emissions reductions from these factors. The following measures were assumed to apply to the project site/design:

- Measure 1: Bike Racks
- Measure 2: End of Trip Measures
- Measure 4: Proximity to Bike Path/Bike Lane
- Measure 5: Pedestrian Network
- Measure 15: Office Mixed Use Proximate
- Measure 22: Urban Mixed Use Measure

Table 4.3-7 Operational Business as Usual Greenhouse Gas Estimates	
Source	Emissions (MTCO ₂ e per year)
Transportation (motor vehicles)	1,899.96
Natural Gas	153.34
Electricity	543.02
Water Transport/Treatment	14.03
Waste	344.19
Area Sources	0.23
Total	2,954.77
MTCO ₂ e = metric tons of carbon dioxide equivalents	

The SJVAPCD calculator estimated that the above measures would reduce GHG emissions by 10.375%. This reduction was applied to vehicular emissions only. Table 4.3-8 shows the resulting project emissions compared to emissions under the Business as Usual (BAU) assumption. Project reductions and anticipated reductions due to regulations would decrease emissions by approximately 30.1 percent. This reduction would comply with the SJVAPCD threshold of a 29-percent reduction in emissions. Impacts from GHG emissions would, therefore, be less-than-significant.

Sector	Affected Emission Sources	California Legislation	Reduction from 2020 GHG Sector Inventory (%)	Total Regulation Reductions for the Applicable Sector (%)
Mobile	Transportation	AB 1493 Pavley LCFS Passenger Vehicle Efficiency	26.9	26.9
Area	Natural Gas	Energy Efficiency Measures	9.5%	9.5
Indirect	Electricity	RPS	21.0%	26.2
		Energy Efficiency Measures	15.7%	

Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; RPS = Renewable Portfolio Standard
Source: Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, revised June 2010.

Table 4.3-9 shows a summary of resulting project emissions compared to emissions under the Business as Usual assumption. Project reductions and future regulations would reduce emissions by approximately 34.7%. This reduction would comply with the SJVAPCD threshold of a 29% reduction in emissions. **Impacts from GHG emissions would, thus, be less-than-significant.**

Source (Sector)	Business as Usual Emission Inventory (MTCO_{2e} / year)	Emissions With Project Design Reductions MTCO_{2e}	Emissions with State Regulations and AB32 Measures MTCO_{2e}
Transportation	1,899.96	1,702.83	1,231.15
Natural Gas	153.34	153.74	138.77
Electricity	543.02	543.02	343.73
Water transport/Treatment	14.03	14.03	8.88
Solid Waste	344.19	344.19	344.19
Area Sources	0.23	0.23	0.21
Total	2,954.77	2,758.04	2,066.93
Percent Emission Reductions from Business as Usual			30.1

MTCO_{2e} = metric tons of carbon dioxide equivalents

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. The SJVAB is in nonattainment for the federal and state standards for ozone, PM₁₀, and PM_{2.5}. Construction of the project would not exceed SJVAPCD's thresholds for ROG, NO_x, and PM

emissions, and would not contribute to a cumulative significant impact. The project's operational emissions also do not exceed the SJVAPCD thresholds for ROG and NO_x, which are ozone precursors. According to the SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts*, "any proposed project that would individually have a significant air quality impact ... would also be considered to have a significant cumulative air quality impact." The project would not exceed the threshold of significance for ozone precursors, but would still contribute to a cumulative impact on air quality resulting from growth in the air basin.

To address cumulative impacts, the San Joaquin Valley Air Basin has implemented SJVAPCD Rule 9510. This rule reduces the impact of NO_x and PM₁₀ emissions from growth on the Air Basin. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through onsite mitigation, offsite SJVAPCD-administered projects, or a combination of the two. The proposed project will submit an Air Impact Assessment application in accordance with the requirements of Rule 9510. Compliance with SJVAPCD Rule 9510 will avoid the project's contribution to cumulative air quality impacts; therefore, project cumulative air quality impacts would be less-than-significant.

As noted previously, impacts associated with GHG are considered exclusively cumulative impacts, since there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008). The analysis of the project's contribution to cumulative GHG emissions and associated climate change effects, and the project's impact on the State of California's regulatory goal of attaining the mandates of AB 32 are detailed above. Based this evaluation, the project's incremental impact on greenhouse gas emissions and global climate change would not be cumulatively considerable and the project's cumulative effects on GHG emissions, global climate change, and potential conflicts with attainment of AB32 mandates are less-than-significant.

The project would not result in a cumulatively considerable incremental effect on air quality or greenhouse gas emissions; therefore, the cumulative impact is less-than-significant.

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4.4 BIOLOGICAL RESOURCES

Introduction

A biological assessment of the project site was conducted by Denise Duffy & Associates, Inc. (DD&A). The biological investigation characterized the existing biotic resources on and surrounding the project site, identified special-status botanical and wildlife species and sensitive habitats, evaluated impacts to these resources, and provided appropriate mitigation to reduce impacts.

Setting

A large portion of the project site has been previously developed with residential uses, which do not provide habitat for special-status species. Except for the evaluation of trees to be removed, the following section focuses primarily on the undeveloped section of the project site on the eastern portion of the property. This approximately two-acre area is bound by W. San Jose Avenue, W. Scott Avenue, and single family residential properties.

Survey Methodology

Biological surveys were conducted by DD&A on May 26, 2010 to assess the environmental conditions of the site and its surroundings, evaluate the general habitat features and environmental constraints at the site, and provide a basis for recommendations to minimize and avoid impacts. Botanical surveys consisted of a thorough review of the CDFG California Natural Diversity DataBase (CNDDDB) and included identifying all plant species found on the site to the intraspecific taxon necessary to exclude it as being a special-status species. Habitats within the project site were characterized in the field to assess for potential project-related impacts to wildlife and wildlife habitats, and for potential occurrences of special-status wildlife species.

Special-Status Species

Plants and animals that have been formally listed or proposed for listing as Rare, Endangered, Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA) are afforded protection under the ESA and CESA. Plants on the California Native Plant Society (CNPS) list, as well as CDFG “species of special concern,” and U.S. Fish and Wildlife Service (USFWS) federal “species of concern,” have no special legal status; however, these species are given management consideration whenever possible. Impacts to these species may be considered significant under CEQA.

Raptors (e.g., birds of prey such as eagles, hawks, and owls) and their nests are protected under both federal and state laws and regulations. The federal Migratory Bird Treaty Act of 1918 (MBTA, 16 USC 703 and state Fish and Game Code Section 3513) prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Birds of prey are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

A complete list of special-status plant and wildlife species known or which have the potential to occur within the vicinity of the project site, along with their legal status and habitat requirements, was compiled for this EIR (refer to Appendix C). This list was based on the documented occurrences reported in the CNDDDB RareFind Report and literature reviewed, as well as evaluation of the geographic ranges and habitat requirements of species and habitat conditions on the property. As detailed in Appendix C, all of the special-status plant and wildlife species known

or which have the potential to occur within the vicinity of the project have been determined to be either “not present” or “unlikely.” Not present indicates that the species was not observed during surveys. Unlikely indicates that the species is not known to occur in the vicinity from the CNDDDB or other documentation, and no suitable habitat is present within the site.

Data Sources

The following primary literature and data sources were reviewed to determine the occurrence or potential for occurrence of special-status species on the project site: current agency status information obtained from the USFWS and CDFG for species listed, proposed for listing, or candidates for listing as Threatened or Endangered under the ESA and CESA; species considered federal “species of concern” and CDFG “species of special concern;” the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2001); and the CNDDDB RareFind occurrence reports. The following quadrangles from the CNDDDB were reviewed for documented special-status species occurrences within and in the vicinity of the project: Clovis, Fresno North, Fresno South, Friant, Gregg, Herndon, Kearney Park, Lanes Bridge and Malaga. The project site falls within the Fresno North quadrangle and the surrounding quadrangles were included in the review as they contained similar ecological conditions.

Sensitive Habitats/Wetlands

The project site was surveyed for sensitive habitats. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDDB’s working list of high priority and rare natural communities habitats (i.e., those habitats that are Rare or Endangered within the borders of California, CDFG, 2003), and those that are critical habitat in accordance with the Endangered Species Act.

Habitat Types

Disturbed, annual grassland. The project site is highly disturbed and has been regularly disced or tilled. The site is dominated by non-native annual grasses, including soft chess (*Bromus hordaceous*), wild oat (*Avena fatua*) and kikuyu grass (*Pennisetum clandestinum*), as well as weedy species commonly found in disturbed areas including long beaked filaree (*Erodium botrys*), Italian thistle (*Carduus pycnocephalus*), and smooth cat’s ear (*Hypochaeris glabra*). Disturbed, annual grassland is not considered a sensitive habitat by CDFG.

The vegetation within the project site consists of relatively low quality wildlife habitat. Wildlife species that may be present occasionally on the project site are those species typical to disturbed sites and adapted to urbanized areas, including the American crow (*Corvus brachyrhynchos*), scrub jay (*Aphelocoma californica*), raccoon (*Procyon lotor*), and skunk (*Mephitis mephitis*), as well as feral cats and dogs.

Trees. According to the Conceptual Tree Removal Plan (Lars Anderson and Associates, Inc., 2010) provided by the applicant, a total of 138 trees have been identified on the project site. Tree species include redwood, pine, palm, olive, and fig. Of the 138 trees, 115 are planned for removal. No areas on the site plan were identified for tree conservation, replanting, or transplanting. The removal and alteration of trees as a result of this project would require compliance with the City of Fresno Municipal Code and conformance with mitigation identified within this EIR (see additional discussion below).

Special-Status Species

Raptors and Migratory Birds. Raptors, migratory birds, and their nests are protected under the MBTA and California Fish and Game Code. Species observed or with some likelihood to occur (at least for foraging) at the project site include, but are not limited to, the following: red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), and American kestrel (*Falco sparverius*). While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion.

Most raptors are breeding residents throughout the majority of the wooded portions of the state. Raptors can be found from sea level to above 9,000 feet. Stands of live oak, riparian deciduous or other forest habitats, and open grasslands are used most frequently for nesting. Breeding occurs between March and August, with peak activity from May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Sensitive Habitats

No sensitive habitats, including wetlands, were observed within the project site.

Regulatory Environment

Federal

Provisions of the federal Endangered Species Act (ESA) of 1973 (16 USC 1532 *et seq.*, as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register U.S. Fish and Wildlife Service or NOAA Fisheries (formerly known as the National Marine Fisheries Service). The ESA is administered by the USFWS and NOAA Fisheries. In general, NOAA Fisheries is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Federal Candidate species are “taxa for which (USFWS) has on-file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded.” Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning. In 1996, the USFWS discontinued the Category 3 and 4 classifications for federal Candidate species (USFWS, 1996). Species either are identified as Candidate species with a listing priority classification, designated as federal “species of concern,” or are no longer given any federal status.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered. Take, as defined by ESA, is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification.” In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for take of a federally listed species, a Section 7 (federal agency) or Section 10 (private land owner) USFWS Incidental Take Permit may be required to authorize the “incidental take” of that species. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations. The USFWS is responsible for overseeing compliance with the MBTA.

State

The California Endangered Species Act (CESA) was enacted in 1984. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." It does not include habitat destruction in the definition of take. A Section 2081 Incidental Take Permit from the CDFG is required to "take" any state listed species.

The California Native Plant Protection Act (NPPA) of 1977 directed the CDFG to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in the state." The Act prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. The CESA and NPPA authorized the California Fish and Game Commission to designate endangered, threatened and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the NPPA are not protected under CESA.

Raptors and their nests are protected under both federal and state laws and regulations. Section 3503 of the CDFG Code prohibits the killing, possession, or destruction of bird eggs or nests. Section 3503.5 and 3513 prohibit the killing, possession, or destruction of all nesting birds (including raptors and passerines). Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of nongame birds.

The classification of Fully Protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (Section 5515), mammals (Section 4700), amphibians and reptiles (Section 5050), and birds (Section 3511). Most Fully Protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

CDFG also maintains a list of animal "species of special concern," most of which are species whose breeding populations in California may face extirpation if current population trends continue. Although these species have no legal status, the CDFG recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

The Natural Heritage Division of the CDFG administers the state Rare Species Program. CDFG maintains lists of designated endangered, threatened, and rare plant and animal species. Listed species either were designated under the NPPA or designated by the Fish and Game Commission.

In addition to recognizing three levels of endangerment, the CDFG can afford interim protection to Candidate species while they are being reviewed by the CDFG Commission.

Under provisions of Section 15380(d) of CEQA, the project lead agency and CDFG, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFG considers plant species on List 1 or 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001) as qualifying for legal protection under this CEQA provision. Species on CNPS List 3 or 4 may, but generally do not, qualify for protection under this provision.

Local

Fresno City Municipal Code Chapter 13 Article 3 – Street Trees and Parkways. Chapter 13 Article 3 of the City of Fresno Municipal Code outlines policies regarding tree removal and alteration. The policies applicable to this project include Sections 13-305.c (Tree Preservation by the Property Owner) and 13-305.h (Construction Areas). To summarize, these policies require that:

- 1) Every property owner apply to the Director for a permit to trim or remove and replace street trees at the property owner's expense, provided that the replacement trees are from the Master Tree List and further provided that the property owner pays any/all applicable scheduled fees. Except that minor trimming to alleviate a dangerous condition presented by a tree may be done with Director's prior consent, by the property owner without a permit. Any such trimming must be performed in a manner that ensures tree preservation.

Permit applications shall include at a minimum the number and location of each tree to be removed, the type and approximate size of the tree, reason for removal. Each application shall be reviewed and determined on the basis of the following criteria (i) the location and condition of the tree, (ii) the necessity to remove the tree for economic or other enjoyment of the property, (iii) the topography of the land and the effect of the tree removal upon erosion, soil retention and the diversion or increased flow of surface water, (iv) the number, species, size and location of existing trees in the area and the effect the removal would have upon shade, privacy impact, scenic beauty, property values and any established standards of the area, and (v) the number of healthy trees the property is able to support according to good forestry practices. A condition to any grant of permit allowing removal of a tree shall be applicant's obtaining and planting of one or more replacement trees from the Master Tree List at locations and in quantities designated by the Director at the applicant's cost.

- 2) Any tree growing upon public property which is to be removed for construction purposes shall be replaced, if it is possible to do so in accordance with the city's tree planting policy. If the Director determines that a tree can be replaced, the person causing its removal shall, at his/her own expense, remove and replace such tree with a tree in a location and of a size and species to be determined by the Director. If the Director determines that a tree cannot be replaced, the person causing its removal shall, at his/her own expense, remove the tree and pay to the city the reasonable value of the tree, as fixed by the Director.
- 3) Any tree growing upon public property near any excavation, construction or street work shall be sufficiently guarded and protected by those responsible for such work so as to prevent any injury to said tree. No person shall excavate any ditches, tunnels or trenches, or install pavement within a radius of four feet from any public tree without the written permission of the Director.

- 4) Every property owner may apply to the Director for a permit to trim or remove and replace street trees at the property owner's expense, provided that the replacement trees are from the Master Tree List and further provided that the property owner pays any/all applicable scheduled fees. Except that minor trimming to alleviate a dangerous condition presented by a tree may be done with Director's prior consent, by the property owner without a permit. Any such trimming must be performed in a manner that ensures tree preservation.

2025 Fresno General Plan. The City of Fresno General Plan contains provisions for the protection of biological resources through proper planning and environmental review. An analysis of the project's consistency with relevant policies of the General Plan is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service; or
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service; or
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; or
- impede the use of native wildlife nursery sites or directly harm nesting species protected under the provisions of the Migratory Bird Treaty Act.

Impacts and Mitigation

Impacts to Special-Status Species

Raptors, migratory birds, and their nests are protected by both federal and state regulations (MBTA and CDFG Code Sections 30503 and 3503.5), which protect birds of prey, migratory birds, and their eggs and nests. Suitable nesting habitat is found within the redwood and pine trees throughout the project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered

“taking” by CDFG. Any loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment would constitute a significant impact. Construction activities such as tree removal or site grading that disturb a nesting bird on-site or immediately adjacent to the construction site would result in a potentially significant impact. The project would not impact any special status plant species since none occur on the site. Impacts to nesting birds would be reduced to a less-than-significant level with implementation of mitigation identified below in accordance with the requirements of the CDFG.

Impact **Development of the project may result in significant impacts to nesting raptors and other migratory birds. *This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.***

Mitigation

4.4-1 If project activities cannot avoid the nesting season (generally March 1 – August 31), the project proponent shall retain a qualified biologist to conduct focused pre-construction surveys for nesting birds within 15 days of the commencement of construction activities to avoid impacts to any nesting birds present. The pre-construction surveys shall be conducted in all areas that may provide suitable nesting habitat within 300 feet of the construction area. If active nests are found, the biologist shall establish a suitable construction buffer until the young have fledged. For construction activities that occur outside of the nesting season (generally September 1 through February 28), pre-construction surveys are not required.

Impacts to Wildlife Movement and Nursery Sites

The project site is surrounded by commercial and residential development and major roadways; therefore, the site does not serve as an optimal wildlife corridor or nursery site. **The proposed project would not impact wildlife movement or nursery sites.**

Consistency with Local Policies/Ordinances Protecting Biological Resources

The project is consistent with local policies and ordinances intended to provide protection for biological resources. The project would be required to comply with the tree preservation policies identified in the City of Fresno Municipal Code (Chapter 13, Article 3). The potential wildlife impacts associated with tree removal are addressed above in the discussion of impacts to special-status avian species. Specific impacts to trees are discussed below.

The project site contains a total of 138 trees. The project would require the removal of up to 115 of these trees, the majority of which are pine. The removal of that portion of the 115 trees that are described in the Fresno Municipal Code Section 13-305(c) would be subject to the requirements of Chapter 13, Article 3 of the City’s Municipal Code.¹ Tree replacement ratios shall be at the Planning Director's discretion, consistent with the City’s Master Tree Policy. The Conditional Use permit process will determine the species and location of trees planned for relocation or planting. Any tree growing on public property that is to be removed for construction purposes would also require replacement in accordance with the City’s tree planting policy. In addition, the project could indirectly impact the trees to remain through trimming, limbing, pruning, or other activities within the tree’s dripline. These activities represent a

¹ These consist of “street trees” based on location within abutting parkways, setbacks, or within public tree easements.

potentially significant impact that would be reduced to a less-than-significant level with mitigation.

Impact **Development of the project would result in the removal of a substantial number of trees. In addition, trees to be retained may be impacted by construction activities. *This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.***

Mitigation

4.4-2 Prior to issuance of any grading permits, a tree removal and protection program shall be provided by the applicant to the City that includes the following information: 1) location, type, size, and health of all trees to be removed, 2) areas for tree preservation, 3) tree replacement plantings and ratios, and 4) tree protection measures for individual trees to be retained. This program will be defined as part of the Conditional Use permit process.

Conflict with the Provisions of an Adopted Habitat Conservation Plan

The project site is not located within the boundaries of an adopted Habitat Conservation Plan (HCP). The project does not conflict with the provisions of any plan.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

The project and other cumulative development would be subject to local, state and federal regulations designed to avoid and/or minimize significant impacts to biological resources. The cumulative projects are located in urbanized, relatively disturbed areas.

Given the disturbed nature of the project area and the regulations requiring mitigation for impacts to biological resources, the project's incremental impacts are not cumulatively considerable and the cumulative impacts to biological resources are therefore less-than-significant.

4.5 CULTURAL RESOURCES

Introduction

This section addresses the cultural resources including historical, archaeological, and paleontological features known to occur in the project area. This discussion is based on a Cultural Resources Literature and Field Review prepared by Basin Research Associates, Inc. (January 2010) and a Historical Evaluation for the property at 507 W. San Jose Avenue (Johnson Architecture, January 2010). The historical evaluation is contained in Appendix D and the archaeological investigation and the archaeological investigation is on-file with the City of Fresno Development and Resource Management Department, 2600 Fresno Street, Fresno, California.

Setting

Ethnographic Setting

Prehistoric occupation and use of the general region appears to extend over 5,000-7,000 years or more. Current archaeological data suggests an increase in the prehistoric population over time due to more efficient resource procurement/storage and increasing political complexity. The project area lies in the far southern end of the Northern Valley Yokuts or Valley Yokuts tribe. Researchers agree that the group known as the Pitkachi was located on the south side of the San Joaquin River. Pitkachi villages include Pitkachi, Wechikit, both north and south of Sanger, and Gewachiu several miles east of Fresno Slough. Native American occupation sites in this region appear to have been selected for accessibility, protection from seasonal flooding, and availability of resources (Basin Research 2010).

The Southern Valley Yokuts first encountered Europeans in 1772 when Spanish missionaries entered the region. Due to the remoteness and inaccessibility of the region, however, they were spared intensive contact until the 1820s when Mexican settlers began to invade the area. Following the discovery of gold in California in 1848, settlers flooded into the San Joaquin Valley and carried out a campaign to drive the Yokuts off their land. In 1851 the remaining Yokuts groups ceded their lands to the U.S., and a reservation system was eventually established for them. Descendants of the Yokuts now live on the Tule River Reservation near Porterville, California, established in 1873, and the Santa Rosa Rancheria near Lemoore, California, established in 1921 (Kroeber 1925, Gayton 1948, Latta 1977, and Wallace 1978).

Historic Setting

During the Mexican Period (1822-1848) and into the American Period, the project site was located on ungranted/patented lands. As a result, none of the Hispanic Era roads or trails would have been located in the vicinity. The Pueblo de las Juntas on the west bank of the San Joaquin River at its junction with Fresno Slough north of Mendota and northeast of Fresno and the Rancho de los Californios on the south bank of the San Joaquin River (several miles east of Las Juntas and Fresno Slough) were the closest early settlements to the project. In 1826 Jedediah S. Smith and his entourage of "mountain men" traveled in the general vicinity, along the south bank of San Joaquin River proceeding northwest up the San Joaquin Valley. Later in 1844, the First Expedition of John C. Fremont and his small group crossed the San Joaquin Valley near what is now Fresno (Hoover et al 1966, Clough and Secrest 1984, and Beck and Haase 1974).

In the mid-19th century, the majority of the rancho and pueblo lands and some of the ungranted land in California were subdivided as the result of population growth, the American takeover, and the confirmation of property titles. Growth in the region was attributable to the Gold Rush (1848), followed by the completion of the transcontinental railroad (1869) and other local railroads. Post

World War II, the agricultural land-use pattern throughout the region was rapidly replaced by urban and suburban development (Hart 1987).

The project is located within the original boundaries of Fresno County, which was created in April 1856. Historic activity has been associated with transportation (by water and rail) as well as agriculture. Fresno City, the namesake of both the county and present-day Fresno, was established about 1855-1875 at the head of navigation of the Fresno Slough. The town included a pier for the transfer of freight. Fresno City experienced a brief boom in 1860 but was largely abandoned by the end of Civil War. The City of Fresno was established within 4,480 acres purchased by the Central Pacific Railroad on the former Moses J. Church Ranch near the A.Y. Easterby Ranch. By July 1874 there were 55 buildings in town, including 25 private homes and 29 businesses. The city was incorporated in 1885 as a town of the fifth class. An 1893 map of Fresno shows most of the buildings on the east side of the Southern Pacific Railroad tracks/railroad reservation at H Street to about O Street (Clough and Secrest 1984).

The area known as "Fig Garden" was named for the extensive fig orchards located approximately eight miles north of the City of Fresno. The name appeared originally on the Santa Fe Railroad map of 1921 as "Fig Garden" and "Figarden" on later maps. The White Adriatic fig trees were planted in the Fresno area circa 1882. The first railroad carload of dried figs was shipped in 1889. A new fig variety, the "Calimyrna" was later developed and grown, due in great part due to James Clayton Forkner. In 1912 Forkner leveled 12,000 acres of "hog wallow land" north of Fresno and dug 25 miles of canals to facilitate the planting of fig orchards, and then subdivided and sold the land within the area known as Fig Garden (Clough and Secrest 1984, Patera 1991, and Gudde 1998).

The Fig Garden school district and Fig Garden post office were established in 1925. Later these fig orchards were displaced by urban and residential development. The Fig Garden Village, located at Palm and Shaw Avenues, opened in 1955 and was the first of the city's regional shopping centers and marked the decline of downtown Fresno as a retail and commercial center. Expansions of Fig Garden Village have included various retail establishments, restaurants, a cinema, and a branch post office. This post office, known variously as Fig Garden, Fig Garden Village, and Figarden, was discontinued and re-established as Fig Garden in 1988. To date, much of the Fig Garden area has not been annexed into the City of Fresno.

Project Site History

Historically the site was used for residential and agricultural purposes. Prior to 1937, the site was likely used for agricultural-related uses. The 1914 *Official Map of the County of Fresno, California* (McKay 1914) shows the project site within an area occupied by the Central Pacific Railway Company Farm (Fickewirth 1992).

Based on a review of historic aerial photographs, the west portion of the project site was primarily vacant from at least 1937 to 1967. From 1973 to 2005, the apartment complex occupied this portion of the site. The central portion of the project site appears to have been used for row crops and orchards, including a residential structure and outbuildings from at least 1937 to 1987. Onsite structures including a former residence were located on the vacant parcel at 525 W. San Jose Avenue until at least 2005. The east portion of the site appears to have been vacant in 1937; from 1950 to the present this area has been occupied by a residential structure at 507 W. San Jose Avenue.

Archaeological Investigation

A prehistoric and historic site records and literature search was completed by the California Historical Resources Information System, Southern San Joaquin Valley Information Center (CHRIS/SSJVIC), California State University Bakersfield (File RS# 09-427, November 20, 2009). In addition, pertinent literature and archival records on file at Basin Research Associates was consulted. Specialized listings for cultural resources consulted by the SSJVIC include the Historic Properties Directory for Fresno County with the most recent updates of the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest as well as other evaluations of properties reviewed by the State of California Office of Historic Preservation. Other sources consulted by the SSJVIC include California Inventory of Historic Resources, California Points of Historical Interest, and California Register. In addition, The California History Plan and Five Views: An Ethnic Sites Survey for California, Historic Properties Directory and available local and regional surveys/inventories/historic maps were consulted.

The Native American Heritage Commission (NAHC) was contacted in regard to resources listed on the Sacred Lands Inventory (Busby 2009). The NAHC search of the Sacred Lands File search did not indicate the presence of Native American cultural resources within one-half-mile radius of the project.

A field survey of the project site was conducted by Basin Research in November 2009 in accordance with standard archaeological practice for central California. This survey was confined to accessible and visible areas. The pedestrian field survey transects were oriented north to south and spaced approximately 10-30 feet apart. A large backfilled pit was observed near the approximate center of the vacant parcel at the center of the site, associated with the demolition of the former residence on the property. Several red brick fragments and concrete fragments were also observed within the light tan-brown sandy clay. Numerous burrowing mammal burrows were noted and inspected for indications of a cultural deposit during the inventory. No indications of surface or subsurface prehistoric or significant historic archaeological materials were observed either on the surface or in the backdirt of the animal burrows.

The records search found no recorded cultural resources (including archaeological sites and architectural properties) located within or adjacent to the proposed project or within 0.25 miles. This review included cultural resources listed in the National Register of Historic Places, California Register of Historical Resources, California State Landmarks, and the California Points of Historical Interest. None of the archaeological compliance reports on file at the CHRIS/SSJVIC include the project. The review of the Sacred Lands Inventory by the Native American Heritage Commission (NAHC) was negative (Dave Singleton, NAHC, November 2009).

No known Native American prehistoric sites, ethnographic settlements, trails, traditional or contemporary, or Native American use areas have been recorded or identified in or adjacent to the proposed Project. No known Hispanic Period or American Period dwellings or other significant structures, features, (e.g., rancho headquarters, ranchsteads, Chinese railroad labor camps, water conveyance elements, etc.) have been identified in or adjacent to the project parcel. The project was located within a Central Pacific Railway Company Farm. In general, settlement and historic activities in the study area appears to have been concentrated along the San Joaquin River, the Fresno Slough, and later the railroad corridor(s). No local, state or federal historically or architecturally significant structures, landmarks, or points of interest have been identified within or adjacent to the project site.

In addition to the above investigation, the City of Fresno conducted Native American consultation as required under Senate Bill (SB) 18. The City contacted California Native American tribes from the contact list maintained by the Native American Heritage Commission (NAHC) to initiate consultation on the project related to preserving or mitigating impacts to resources as described in Sections 5097.9 and 5097.993 of the Public Resources Code. The City sent the recognized Native American representatives certified letters to solicit consultation on December 23, 2011 for a 30-day review period. One letter was received by the City from the Table Mountain Rancheria indicating that the project site was outside their area of interest. The City also received a call from a representative of the Traditional Choinumni Tribe concerned about mitigation if resources are uncovered during grading/excavation; the City informed the representative that standard mitigation would be required to cease operation and contact qualified professionals in such an event. None of the other Native American representatives responded to the solicitation letter during the 30-day consultation process, which ended January 31, 2012. Documentation of the Native American consultation is available for review at the City of Fresno Development and Resource Management Department.

Historical Evaluation

The project site is currently occupied by a former apartment complex and vacant land. The west portion of the site contains the former Eden Park Apartment complex, constructed in the 1970s, which consists of eight apartment buildings, a restroom building, a fenced-in swimming pool, parking areas, and landscaping. The central portion of the site is vacant and formerly contained a residence and swimming pool. The east portion of the property (507 W. San Jose Avenue) contains a single family residence constructed in circa 1950. The period of significance for analysis of the building was 1950; for the surrounding neighborhood the period of significance is considered Post-war 1940-1970.

A historical evaluation was conducted for the property at 507 W. San Jose Avenue in order to determine whether the single-family residence qualifies as a potential historic resource in accordance with §15064.5 of the CEQA Guidelines. Generally, resources over 45 years of age may be considered historically significant under CEQA. This evaluation was prepared by Johnson Architecture (January 2010) and is contained in Appendix D.

The single-family residence located at 507 W. San Jose Avenue is an example of the Ranch style. The Ranch style was the dominant style of residential design during the mid-century. It was based on the early Spanish haciendas built throughout Mexico and Southern California in the 1800s and characterized by a single-story sprawling floor plan and integration of indoor and outdoor space. The ranch home of the mid-century was built on a smaller scale than the sprawling haciendas of old California (with lots typically 1/8 to 1/4 acre in size).

The one-story residence was constructed circa 1950 and has an irregular, rectangular footprint and hipped roof, sheathed in composite shingles, with wide eaves and exposed rafter tails. A dropped, secondary shed roof is located on the east elevation, and marks the carport and entrance to the residence. The exterior walls are covered in wood siding. The buildings visible fenestration pattern includes: single aluminum-frame slider windows and a fixed aluminum-frame projecting bay window. The principal residential entry appears to be from the primary north elevation and cannot be viewed from the street. Two windows punctuate the primary north elevation. The dominant window is a projecting, aluminum-frame, fixed bay window. Adjacent to the bay window is a single, aluminum-frame slider. A clear view of the west elevation was obstructed by plant growth and was not visible due to limited access. The east elevation appears to be divided

into two wings: The north wing located under the shed roof and a projecting south wing with a dropped hip roof. At the time of the site visit, visibility of the east elevation was obstructed by plant growth, a fence, and limited access. The rear (south) elevation was not visible due to limited access.

No original building permits could be located for the residence. Four permits were found at the City of Fresno. No information was available as to the architect/builder of the residence. The property is listed as a rental.

Regulatory Environment

2025 Fresno General Plan. The 2025 Fresno General Plan contains several policies to ensure preservation of historical, archaeological, and other cultural resources within the City of Fresno. Please refer to Table 4.9-2 of the Land Use section for a detailed analysis of the project's consistency with the relevant provisions of the General Plan. The following policies are relevant to the proposed project.

City of Fresno Municipal Code. The City of Fresno Municipal Code Chapter 12 Article 16, Historic Preservation, is intended to preserve, promote and improve the historic resources and districts of the City of Fresno. The purpose of the Historic Preservation Ordinance is to designate any building, structure, object, or site as a historic resource and list said resource on the local register of historic resources provided that is the Historic Preservation Commission and City Council find that it is more than 50 years old and the criteria for a historic resource identified in the Historic Preservation Ordinance.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- disturb any human remains, including those interred outside of formal cemeteries.

According to Public Resources Code §5024.1, a historical resource is a resource that is listed in, or determined to be eligible for listing in the California Register of Historical Resources; included in a local register of historical resources; or is identified as significant in an historic resource survey if that survey meets specified criteria. CEQA Public Resources Code §21084.1 provides that any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Public Resources Code §5020.1(q) defines “substantial adverse change” as demolition, destruction, relocation, or alteration such that the significance of the historical resource would be impaired.

Impacts and Mitigation

Impacts to Historical Resources

All resources listed in or formerly determined eligible for the National Register are eligible for the California Register. In addition, properties designated under municipal or county ordinances are also eligible for listing in the California Register. A historical resource must be significant at the local, state, or national level under one or more of the following significance criteria from the California Register of Historical Resources:

Criterion 1: Event or Patterns of Events: It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States. The 507 W. San Jose Avenue residence has not been associated with an important event or patterns of events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. The property is not eligible under Criterion 1: Events or Patterns of Events.

Criterion 2: Important Person(s). It is associated with the lives of persons important to local, California, or national history. Historical research has determined that the 507 W. San Jose Avenue property is not directly associated with any important persons in local, state, regional, or national history. Consequently, the home does not qualify under California Register Criterion 2.

Criterion 3: Design/Construction. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values. The 507 W. San Jose Avenue property was originally built in approximately 1950 in the Ranch architectural style. Although the exterior of the residence appears to be basically unaltered from its original design, it does not embody the distinctive characteristics of the Ranch style, and does not rise to the level of significance necessary for listing on the California Register. The property is not eligible for listing on the California Register of Historical Resources under Criterion 3: Design/Construction.

Criterion 4: Information Potential. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation. The 507 W. San Jose Avenue property has not yielded, and are unlikely to yield information important to prehistory, or local, state, regional or national history, and, consequently, do not qualify under California Register.

Integrity. In addition to having significance, resources must retain enough of their historic character of appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is the authenticity of a historical resource's physical identity and evidenced by the survival of characteristics or historical fabric that existed during the resource's period of significance. There are seven elements of integrity recognized and employed by both the National Register of Historic Places and the California Register of Historical Resources: location, design, setting, materials, workmanship, feeling, and association. A resource that is not considered to retain enough integrity for listing on the National Register may, however, still be eligible for listing on the California Register.

The seven aspects of integrity were considered in evaluating the single-family residence at 507 W. San Jose Avenue. The results of the historical evaluation indicate that the residence retains little integrity. In regards to setting, location, and feeling, the property has undergone minimal change and is predominantly intact. However, the building design, materials and workmanship

have been altered. Although the residence does retain some integrity as a whole the property does not retain sufficient integrity to be considered a historic resource.

In conclusion, the 507 W. San Jose Avenue residence does not qualify for listing on the California Register of Historical Resources either individually or as part of a historic district. Since it does not meet these criteria, it would not appear to be eligible for the City of Fresno Local Register. The building has not been identified as maintaining an association with an important event or person in local, regional, California or national history. The building does not display distinctive construction or design characteristics, or represents the work of a master, or possesses high artistic values. Lastly, the residence has not yielded and is not likely to yield any information important to prehistory or history.

The project does not contain any historic structures. The oldest structure, the residence at 507 W. San Jose Avenue, was constructed in about 1950 and was determined not to be historically significant. Demolition of this structure, proposed as part of the project, would not result in a significant impact on historical resources.

The project would not impact any historical resources.

Impacts to Archaeological Resources

Based on the results of the archaeological investigation, archaeological subsurface testing program and/or monitoring program during subsurface construction is not recommended due to the absence of any formally recorded archaeological sites within or adjacent to the project site; the lack of current surface evidence for archaeological resources; and, the very low potential for significant prehistoric and/or historic cultural deposits based on archival documentation.

The records search found no recorded cultural resources (including archaeological sites and architectural properties) within or adjacent to the proposed project or within 0.25 miles. This review included cultural resources listed in the National Register of Historic Places, California Register of Historical Resources, California State Landmarks, and the California Points of Historical Interest. None of the archaeological compliance reports on file at the CHRIS/SSJVIC include the project. The review of the Sacred Lands Inventory by the Native American Heritage Commission was negative. In addition, no known Native American prehistoric sites, ethnographic settlements, trails, traditional or contemporary Native American use areas have been recorded or identified in or adjacent to the proposed project. No known Hispanic Period or American Period dwellings or other significant structures have been identified in or adjacent to the project parcel. No local, state or federal historically or architecturally significant structures, landmarks, or points of interest have been identified within or adjacent to the project. In addition, the Native American consultation conducted by the City did not identify any concerns.

No evidence of cultural resources was found on or adjacent to the project site, and the archaeological investigation concluded that the potential for significant prehistoric and/or historic cultural deposits on the site is very low. Although unlikely, construction of the project could potentially uncover buried archaeological resources or human remains during excavation and clearing activities. This represents a potentially significant impact.

Impact Construction of the project may result in the discovery and disturbance of unknown, buried archaeological resources and/or human remains. This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation

- 4.5-1 Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).
- 4.5-2 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Fresno with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Fresno coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.

Paleontological Resources

No paleontological resources are known to exist in the project area; therefore, project development is not expected to result in direct or indirect impacts to unique paleontological resources. Although unlikely, construction of the project could potentially uncover previously unknown buried paleontological resources during excavation and clearing activities. This represents a potentially significant impact.

Impact **Construction of the project may result in the discovery and disturbance of unknown, buried paleontological resources. This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.**

Mitigation

- 4.5-3 Should evidence of paleontological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified paleontologist. If evidence of any paleontological resources is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance. The paleontologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate paleontological impacts.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

The project could significantly impact archaeological resources if construction activities encounter and disturb unknown buried resources. Mitigation has been identified for the project to reduce impacts to cultural resources to a less-than-significant level. The site does not contain any historic structures. Survey and archaeological archival search of the site indicate that the property does not appear to contain any archaeological resources. Thus, the project would not contribute to significant cumulative impacts to cultural resources. In addition, the incorporation of appropriate management measures to avoid existing resources, protect resources, and/or document resources by cumulative development in the area, as required by the City and CEQA, would minimize impacts to cultural resources. **The project would not, therefore, have a cumulatively considerable incremental effect on cultural resources, and the cumulative impact is less-than-significant.**

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4.6 GEOLOGY, SOILS & MINERAL RESOURCES

Introduction

The Geotechnical and Geological Hazards section describes the geologic and seismic setting for the project and evaluates its potential to cause geologic impacts, such as construction-related erosion and/or geologic hazards such as earthquakes. This section summarizes the results of a geotechnical engineering feasibility investigation prepared for the project by Moore Twining Associates, Inc. (June 17, 2011) contained in Appendix E of this EIR. This report updates an earlier report prepared in 2008 by Moore Twining for a previous residential project on the site.

The scope of the geotechnical analysis consisted of the following: 1) literature review, including previous geotechnical investigations on the site by BSK & Associates; 2) aerial photo review; 3) geologic site reconnaissance; 4) soil borings and sampling; 5) standard penetration tests; and 6) laboratory testing to evaluate geologic and geotechnical hazards and engineering properties of the subsurface soils.

Setting

The project site is located within the San Joaquin Valley structural basin, bounded to the east by the Sierra Nevada Mountain Range and to the west by the Coastal Ranges. The project area is located on the high alluvial fan of the San Joaquin River.

Site Characteristics

The project area is relatively flat and lies at an elevation of 320 feet above mean sea level (msl). The project site is occupied by a vacant apartment complex on the west side of the property and vacant land and a single family home on the east portion of the property. Some construction debris is found where former structures were located. An in-ground swimming pool was reportedly located near a former residence within the central portion of the site. At the time of the geotechnical investigation, depressions were noted within the limits of and near the former swimming pool of one to 2.5 feet.

The project site is mapped as containing soils classified as San Joaquin Sandy Loam, shallow, 0-3 percent slopes (Natural Resources Conservation Service, US Department of Agriculture, Soil Survey Geographic Database). In April 2008, seven test borings were drilled at the Project site to depths of about 30 to 51.5 feet below site grade (bsg) as part of the preliminary geotechnical investigation. The test borings were logged and the soils classified. The depths and locations chosen for the borings were based on the anticipated location of the proposed buildings, type of construction, estimated depth of foundation loads, and subsurface soil conditions. Locations of the borings are shown in Appendix E. The test borings were generally loosely backfilled with excavated materials, indicating that some settlement should be anticipated. One of the borings (b-7) was backfilled with pea gravel for the upper ± 5.0 feet.

Based on the results of the geotechnical study, the near surface soils generally consist of silty sands from the ground surface to depths ranging from about 5 feet to 15 feet bsg. The near-surface silty sands were underlain by poorly graded sands extending to depths ranging from 36 feet to 45 feet bsg. Interbedded layers of silty sands and sandy silts were encountered below the poorly graded sands to a maximum explored depth of 51.5 feet bsg. Shallow fill soils were encountered in the majority of the test borings to depths of one to two feet bsg. Dense to very dense cemented soils were encountered at a depth of about two to 10 feet bsg.

Groundwater was not encountered at the time of the drilling to a maximum depth of 51.5 feet. Based on review of nearby water well data, historic groundwater depths are reported to be greater than 50 feet bsg (Department of Water Resources Groundwater Database Website). Groundwater levels fluctuate over time since they are dependent on seasonal and other factors.

Events and Processes

Analysis of the engineering properties of onsite soils based on the results of the geotechnical investigation evaluated the following conditions on the project site.

Existing Fills. Shallow fill soils were encountered on the project site during the geotechnical investigation. In addition, a former in-ground swimming pool was backfilled within the property boundaries. Over-excavation and compaction of all existing fills would avoid impacts associated with existing fill materials as per the recommendations of the geotechnical report, discussed in more detail below.

Lateral Spreading. Lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore pressure build-up or liquefaction. Lateral spreading typically occurs on mild slopes underlain by loose sands and a shallow groundwater table. The site is essentially flat and does not have a shallow groundwater table, thus lateral spreading is not an issue.

Liquefaction. Liquefaction is the transformation of soil from a solid to a liquid state as a consequence of increased pore-water pressures, usually in response to strong ground shaking, such as those generated during a seismic event. Seismic settlement may also occur during seismic shaking. Considering the historic depth to groundwater (50+ feet bsg), liquefaction potential on the site is very low. Seismic settlement analysis indicated that onsite soils during a peak event magnitude 6.3 earthquake would result in total seismic settlement of ½ inch and differential settlement of about ¼ inch in 40 feet.

Seismicity. The project site is located within a moderately active seismic area. The City of Fresno and surrounding region is not located on any State of California Seismic Hazard Zone Maps (as per the California Seismic Hazard Zonations Program, 2009). The nearest potentially active fault to the site is the Clovis Fault, located about nine miles east. The potential for fault rupture on the site is low; however, ground shaking from an earthquake would be anticipated during the design life of the proposed office building.

Settlement. Increases in stress to underlying soils from new foundations and structures and other development can cause vertical deformation of soils, damaging improvements. Differential settlement can be the most damaging. Based on the proposed site plan, allowable total and differential static settlements of 1½ inch and ¾ inch, respectively, were considered for foundations. Over-excavation and compaction of fill would reduce settlements to acceptable levels as per the recommendations of the geotechnical report as discussed in more detail below.

Soil Expansion. Expansive soils shrink and swell as a result of moisture changes. This can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Expansion testing was performed on representative samples of the near surface soils in the area of planned improvements. The results indicate that the soils have a low expansion potential.

Regulatory Environment

California Alquist-Priolo Earthquake Fault Zoning Act and Seismic Hazard Mapping Act.

The Alquist-Priolo Earthquake Fault Zoning Act was enacted in 1972 to minimize hazards from fault rupture by prohibiting structures for human occupancy across the trace of an active fault (within 50 feet). The Act requires delineation of “Earthquake Fault Zones,” in which cities and counties cannot issue development permits until geologic investigation shows that development within such zones is not threatened by future faulting.

The Seismic Hazards Mapping Act was adopted in 1990 to protect the public from earthquake hazards including ground shaking, liquefaction, seismically induced landslides, and other related ground failure. Maps showing seismic hazard zones, prepared by the California Geological Survey, identify areas susceptible to seismic hazards that may have special requirements, including additional geotechnical analysis.

California Building Code (CBC). The CBC identifies standards for the design and construction of commercial structures, including excavations, foundations, building frames, retaining walls, and other elements to mitigate the effects of seismic shaking and adverse soil conditions.

Erosion Control Programs. The incorporation of Best Management Practices (BMPs) to avoid or minimize soil erosion from construction sites is required under various regulations of the Clean Water Act, Fresno Metropolitan Flood Control District, and City of Fresno Department of Public Works. The City of Fresno Municipal Code, Section 12-1023, also calls for measures to prevent sedimentation.

2025 Fresno General Plan. The General Plan contains several policies intended to protect people and structures from geotechnical hazards in the City. An analysis of the project’s consistency with relevant policies is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR.

Thresholds of Significance

In accordance with the CEQA Guidelines, a project impact would be considered significant if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
 - Seismic ground shaking,
 - Seismic-related ground failure, including liquefaction,
 - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Impacts and Mitigation

Based on the results of the geotechnical investigation, it was determined that the project site is suitable for construction of the proposed office development with regard to preliminary design features. A design-level geotechnical investigation would be completed to provide specific recommendations for construction, as described below under Mitigation.

Seismic Hazards

The proposed project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. The nearest known potentially active fault is the Clovis Fault, located about nine miles east of the site. No active faults have been mapped within the project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. **The impact of seismic hazards on the project would be less-than-significant.**

Grading and Erosion

The project would require extensive grading on the project site to facilitate construction of proposed uses. Grading would occur throughout most of the site and require the excavation and removal of 35,000 cubic yards of material. The project area is relatively flat and would not be subject to high velocity surface runoff flows that contribute to high erosion rates. However, preparation and construction activities, including tree-removal, would disturb site soils and increase its susceptibility to erosion. The following mitigation measures would further reduce this potential impact to a less-than-significant level.

Impact Construction of the project could result in soil erosion as a result of ground disturbing activities. This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.

Mitigation

- 4.6-1 In order to reduce on-site erosion due to project construction and operation, an erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for the site preparation, construction, and post-construction periods by a registered civil engineer or certified professional. The erosion control plan shall incorporate best management practices consistent with the requirements of the National Pollution Discharge Elimination System (NPDES). The erosion component of the plan must at

least meet the requirements of the SWPPP required by the California State Water Resources Control Board. If earth disturbing activities are proposed between October 15 and April 15, these activities shall be limited to the extent feasible to minimize potential erosion related impacts. Additional erosion control measures shall be implemented in consultation with the City of Fresno. Prior to the issuance of any permit, the project proponent shall submit detailed plans to the satisfaction of the City of Fresno. The components of the erosion control plan and SWPPP shall be monitored for effectiveness by City of Fresno. Erosion control measures may include, but not be limited to, the following:

- a. Limit disturbance of soils and vegetation disturbance removal to the minimum area necessary for access and construction;
- b. Confine all vehicular traffic associated with construction to the right-of-way of designated access roads;
- c. Adhere to construction schedules designed to avoid periods of heavy precipitation or high winds;
- d. Ensure that all exposed soil is provided with temporary drainage and soil protection when construction activity is shut down during the winter periods; and
- e. Inform construction personnel prior to construction and periodically during construction activities of environmental concerns, pertinent laws and regulations, and elements of the proposed erosion control measures.

Landslides and Lateral Spreading

According to the preliminary geotechnical analysis prepared for the project, there is no indication of past slope instability at the project site. In addition, the project site is relatively flat. The project will not result in on- or off-site landslides or induce lateral spreading. **The project would not be subject to impacts from landslides and lateral spreading.**

Soils

Expansion testing was performed on representative samples of the near surface soils in the area of planned improvements, and the results indicate that the soils have a low expansion potential. Although the proposed project would not be exposed to geological hazards due to expansive soils, the characteristics of site soils have been identified as a potential geotechnical concern related to settlement. Shallow fill soils were encountered on the property during the geotechnical investigation as well as a former, backfilled swimming pool. Over-excavation and compaction of fill would reduce settlements to acceptable levels as per the recommendations of the geotechnical investigation. Implementation of mitigation measure 4.6-2 below would ensure that site preparation and foundation design take into account on-site soil limitations.

Impact **The project site may be subject to soil hazards including existing fills and settlement potential that could adversely impact proposed structures. *This is a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measure.***

Mitigation

4.6-2 The project proponent shall retain a registered geotechnical engineer to prepare a design-level geotechnical analysis prior to the issuance of any grading and/or building permit. The design-level analysis shall address site preparation measures and foundation design requirements as set forth in Appendix E. The design-level analysis shall be submitted to

the satisfaction of the City of Fresno. Final design-level project plans shall be designed in accordance with the approved geotechnical analysis. This shall include certification of engineered fills and subgrade preparation through monitoring of earthwork and compaction testing by a geotechnical engineer during construction.

Subsidence, Liquefaction, and Collapse

Considering the historic depth to groundwater (50+ feet bsg), liquefaction potential on the site is very low. Seismic settlement analysis indicated that onsite soils during a magnitude 6.3 earthquake would result in total seismic settlement of ½ inch and differential settlement of about ¼ inch in 40 feet, which can be avoided through standard construction methods. Implementation of mitigation measure 4.6-2, which requires that final design-level plans are designed in accordance with a design-level geotechnical analysis, would ensure that impacts associated with seismic settlement would be reduced to a less-than-significant level. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and would therefore avoid potential seismically induced hazards on planned structures. The site is not susceptible to subsidence or collapse. **Impacts due to subsidence, liquefaction, and collapse would be less-than-significant.**

Mineral Resources

The project site is located in an urban area and does not contain any areas of important mineral resources as designated by the California Department of Conservation Division of Mines and Geology, in accordance with the Surface Mining and Reclamation Act. **The project will not impact mineral resources.**

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

Development of the project site would not significantly contribute to the cumulative impacts associated with the increase in exposure to seismic hazards. Since all development within the City of Fresno and surrounding area would be subject to California and Uniform Building Code standards, including requirements for site-specific engineering design, on-site inspections, and testing, the cumulative impact from seismic hazards would be considered less-than-significant. In addition, the project would not significantly contribute to cumulative impacts associated with settlement or other soil hazards. Mitigation identified in this EIR would be required in accordance with City standards for the project and all new development in the area, thereby avoiding cumulative impacts from soil hazards.

The project would not result in a cumulatively considerable incremental effect on geology/soils; therefore, the cumulative impact is less-than-significant.

4.7 HAZARDS & HAZARDOUS MATERIALS

Introduction

This section assesses the potential public health and safety impacts associated with the project, including the past use and/or storage of chemicals and other hazardous materials. Flooding, seismic/geologic, and public service hazards (such as fire and emergency response) are discussed within their respective sections of this EIR.

Setting

A Phase I Environmental Site Assessment was prepared for the project property by Moore Twining Associates, Inc. (June 26, 2011) and is contained in Appendix F. The report updated a previous Phase I prepared by Moore Twining in 2009. The updated analysis was used to identify potential environmental hazards known to exist on the project site.

The site is situated near the northeast corner of Palm Avenue and Shaw Avenue, and is bounded by N. Palm Avenue to the west; W. San Ramon Avenue, N. Colonial Avenue, and W. San Jose Avenue to the north; the Fig Garden Village shopping center to the south; and single- and multi-family residential development to the north, south, and east. Single family neighborhoods extend to the north/northeast of the site north of W. San Jose Avenue and south/southeast of the site south of W. San Jose Avenue.

The project site is located on 4.69 acres that is currently occupied by a former apartment complex, vacant land, and a single family residence. A site reconnaissance was performed for the site by Moore Twining in 2009 and again in 2011. The west portion of the project site contains the former Eden Park Apartment complex and consists of eight apartment buildings, a restroom building, a fenced-in swimming pool, parking areas, and landscaping. The central portion of the project site is vacant and formerly contained a residence and swimming pool. The east portion of the property contains a single family residence and yard. The 2011 site visit included inspection of the storage rooms and closets at the previous Eden Park apartment complex. No evidence of storage, spillage, staining, or odors associated with hazardous materials was observed.

Based on information from the City of Fresno Development and Resource Management Department, the site address of 569 W. San Jose Avenue was connected to the City's sewer system in 1991. Prior to this connection, the Eden Park Apartment complex used septic systems. The septic systems are believed to have been removed in the early 1990s. The exact location of the former septic tanks is not known. In addition, according to the Planning Department one septic tank associated with 525 W. San Jose Avenue was demolished in 2007; however, the closure of the leach fields was not reported. No evidence of contamination was observed from these systems; however, the septic systems and/or components must be removed and remediated prior to project construction. This issue is discussed further under "Impacts and Mitigation" below.

During the 2009 site survey, several conditions were observed on the project site that are of notable concern. In order to evaluate these concerns, Moore Twining conducted additional analysis of the site to resolve these issues, as summarized below.

Undocumented fill material was used to backfill a former swimming at 525 W. San Jose Avenue, although the backfill source material was not known. Moore Twining conducted soil sampling and analysis within the area of the former swimming pool in December 2010. PCBs were detected within the backfill sample at levels between 0.40 and 2.0 mg/kg. These concentrations

are above the California Department of Toxic Substance Control's California Human Health Screening Level (CHHSL) of 0.089 mg/kg.

Historically the site was used for residential and agricultural purposes. Review of historic and aerial photos by Moore Twining indicates that the west portion of the site was primarily vacant (containing only one elongated structure) from at least 1937 to 1967. From 1973 to 2005, the apartment complex occupied this portion of the site. The central portion of the site appears to have been used for row crops and orchards, including a residential structure and outbuildings from at least 1937 to 1987. In order to address the potential presence of environmentally persistent pesticides from previous agricultural uses, Moore Twining conducted soil sampling within the east portion of the site in December 2010. All samples were either non-detect or at background levels (for California) for environmentally persistent pesticides constituents analyzed.

One pole-mounted transformer was noted near the north edge of the central portion of the site. This transformer is operated and maintained by PG&E. The transformer appeared to be in good condition with no evidence of staining or leakage. The potential impact to the site appears low.

Groundwater Flow

The groundwater flow direction, or gradient, below the project site is to the southeast and at a depth of approximately 120 feet below ground surface (California Department of Water Resources, "Lines of Equal Elevation of Water in Wells Map," 2003). For discussion purposes, cross-gradient refers to the direction perpendicular to groundwater flow and up-gradient refers to the direction opposite of the direction of groundwater flow.

Results of Database Search

A database search was conducted to identify recorded hazardous materials incidents in the project area. The search included recorded incidents on the National Priorities List (NPL), State Priority List (SPL), the Superfund Comprehensive Environmental Response Compensation and Liability Information System List (CERLIS), the EPA's emergency response notification system list (ERNS), and other federal, state, and local agency databases. Requests to review available files for the project area were also submitted to the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substance Control (DTSC).

The project site was not listed in any of the databases searched and no pertinent information was obtained regarding the site from the RWQCB or DTSC. Results of the database search did identify several offsite hazardous materials incidents, as follows:

- David Wasemiller (588 W. San Jose Avenue, 275 feet west of the site) appears on the HAZNET database due to its status as a hazardous materials and/or generation facility.
- Penwalt Corporation (516 W. Shaw Avenue, 1,300 feet south of the site) appears on the SLIC database due to its status as a former cleanup facility.
- Arco #697/Shams Srokh Mossanen (420 W. Shaw Avenue, 1,400 feet south/southeast of the site) appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident.
- Unocal #5938/TOSCO/HB Union (384 W. Shaw Avenue, 1,500 feet south/southeast of the site) appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident.

- Marshal's Mobil (385 W. Shaw Avenue, 1,500 feet south/southeast of the site) appears on the LUST and HIST Cortese databases due to a leaking underground storage tank incident.
- Fig Garden Village (5082 N. Palm Avenue, 2,100 feet west/southwest of the site) appears on the SLIC database due to its status as an open investigation facility as a previous dry cleaning facility with releases of various solvents into the groundwater. Annual monitoring is ongoing.

The Phase I Site Assessment concluded that due to the distance of the above facilities to the project site and their location cross- or down-gradient to the site, the potential impact to the project property was low (see Appendix F). If a release from any of these facilities were to affect the project site, the responsible (contaminating) party would be responsible for remediation.

Regulatory Environment

The generation, storage and handling of hazardous materials and wastes are regulated by various federal, state, and local requirements aimed at the protection of public health and the environment. A summary of relevant regulations is provided below.

Federal

The U.S. EPA is responsible for enforcing regulations at the federal level pertaining to hazardous materials and wastes. The primary federal hazardous materials and wastes laws are contained in the Resources Conservation and Recovery Act (RCRA) of 1976 and in CERCLA of 1980. CERCLA (Superfund) established the National Priorities List for identifying and obtaining funding for remediation of severely contaminated sites. Federal regulations pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR). The regulations contain specific guidelines for determining whether a waste is hazardous, based on either the source of generation or the characteristics of the waste.

The National Emissions Standards for Hazardous Air Pollutants (NESHAP) are emissions standards set by the United States EPA for an air pollutant not covered by National Ambient Air Quality Standards that may cause serious health problems. These standards include guidelines for removing asbestos materials.

Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. Federal safety standards are also included in the California Administrative Code.

State

The U.S. EPA has delegated much of its regulatory authority to individual states whenever adequate state regulatory programs exist. The Department of Toxic Substance Control Division (DTSC) of CalEPA is the agency empowered to enforce federal hazardous materials and waste regulations in California in conjunction with the U.S. EPA.

California hazardous materials and waste laws incorporate federal standards, but in many respects are stricter. For example, the California Hazardous Waste Control Law, the state equivalent of RCRA, contains a much broader definition of hazardous materials and waste. State hazardous materials and waste laws are contained in the California Code of Regulations (CCR), Titles 22 and 26. Regulations implementing the California Hazardous Waste Control Law list 791 hazardous chemicals and 20 to 30 more common materials that may be hazardous; establish criteria for identifying, packaging and labeling hazardous wastes; prescribe management of

hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

Under RCRA, a facility is classified as a generator of hazardous waste if it generates and stores hazardous waste on site for less than 90 days; such a facility is required to obtain an EPA generator's identification number from the EPA or DTSC. If, however, hazardous waste is stored on site for longer than 90 days, the facility is classified as a Transfer, Storage, or Disposal facility and is required to obtain a RCRA Part B Storage Permit which can take as much as two years to obtain. Transportation and disposal of hazardous materials are also regulated; hazardous waste must be characterized to determine methods of disposal and site disposal (i.e., class of landfill).

Under both RCRA and the California Hazardous Waste Control Law, hazardous waste manifests must be retained by the generator for a minimum of three years. A hazardous waste manifest lists a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with DTSC. The generator must match copies of hazardous waste manifests with receipts from the treatment/disposal/recycling facility to confirm that the wastes were properly handled.

Local

2025 Fresno General Plan. The City of Fresno General Plan provides policies for the protection of residents from hazardous materials. An analysis of the project's consistency with relevant policies is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR.

Fresno County Public Health Department. Fresno County Public Health Department, Division of Environmental Health is the Certified Unified Program Agency (CUPA) responsible for administering programs related to the use and storage of hazardous materials including, but not limited to, a hazardous materials business plan, underground storage tanks program, aboveground storage tank program, hazardous waste program, and a hazardous waste treatment program.

San Joaquin Valley Unified Air Pollution Control District. The Air District is the local agency that oversees and enforces air contaminant standards under NESHAP, including asbestos abatement activities. Under the Air District's Rule 4002, written notification to the District is required for demolition and asbestos removal activities.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;

- be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and as a result would create a safety hazard for people residing or working in the project area; or
- be located within the vicinity of a private airstrip, and as a result would create a safety hazard for people residing or working in the project area.

Impacts and Mitigation

Hazardous Material Use

Development and operation of the proposed office building would not entail the routine use and/or transport of hazardous materials. Typical chemicals expected to be used at the project site may include standard household items such as cleaning products and landscaping chemicals (pesticides, herbicides). Future use of hazardous materials associated with the proposed office use would be minor in nature and subject to existing regulatory requirements pertaining to the use and disposal of hazardous materials. **This is considered a less-than-significant impact.**

Exposure to Existing Hazards

The presence of existing hazards on-site may result in a significant public health hazard due to the potential exposure of construction personnel and future site occupants to these hazards if not properly remediated. The presence of known and possible unknown hazards on the project site is considered a potentially significant impact.

The 2011 Phase I Environmental Site Assessment identified potential environmental conditions that could impact the project site. These are summarized below.

- The on-site properties at 507 and 569 W. San Jose Avenue formerly used septic systems. The exact locations of former septic tanks and associated leach fields are unknown. In addition, the closure of the leach fields at 525 W. San Jose Avenue is not documented. These septic systems and/or septic system components must be removed and remediated as needed, as identified below under Mitigation 4.7-1. The City of Fresno also requires a grading permit for removal of abandoned septic systems to ensure that the sites are properly backfilled.
- Backfill was used to fill in the swimming pool at 525 W. San Jose Avenue. Soil sampling detected PCBs at levels between 0.40 and 2.0 mg/kg. The PCB is believed to have been brought onsite via the undocumented fill. The reported concentrations are above the CHHSL, requiring proper removal and disposal, as identified below under Mitigation.
- The project site is currently occupied by structures that may contain asbestos-containing materials and/or lead-based paint. If not properly handled, routine exposure to these materials can cause serious human health concerns. Mitigation measures are identified below calling for asbestos and lead-based paint surveys prior to demolition activities. Further, these measures require that if asbestos and/or lead-based paint are encountered then they shall be removed in accordance with applicable state and federal regulations pertaining to the handling and disposal of these materials.

In order to ensure that potential impacts associated with the exposure of existing on-site hazards are reduced to a less-than-significant level mitigation is warranted to ensure that all hazardous materials and/or conditions are properly managed.

Impact **Development of the project, including excavation, demolition, and other land disturbing activities may result in the potential release of hazardous materials, presenting a public health risk. *This represents a significant impact that would be reduced to a less-than-significant level with the following mitigation measures.***

Mitigation

- 4.7-1 The project proponent shall retain a qualified consultant to receive a City permit to locate and remove the former septic systems at 507 and 569 W. San Jose Avenue, and to locate and remove the former leach field at 525 W. San Jose Avenue in accordance with local, state, and federal guidelines. If evidence of staining, leakage, or odors is identified during removal, the qualified consultant shall assess and remediate any hazardous materials conditions in accordance with local, state, and federal regulatory requirements. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that the septic systems have been removed and any hazardous conditions remediated.
- 4.7-2 The project proponent shall retain a qualified consultant to remove the backfill for the swimming pool at 525 W. San Jose Avenue. The qualified consultant shall remove such materials in accordance with local, state, and federal regulatory requirements. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that the backfill has been evaluated and any hazardous conditions remediated.
- 4.7-3 In order to reduce potential health risks to construction personnel, the project proponent shall retain a qualified consultant to survey all buildings for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition. If asbestos containing material is documented within existing on-site structures, all potentially friable asbestos shall be removed prior to building demolition in accordance with NESHAP guidelines. Under the San Joaquin Valley Unified Air Pollution Control District's Rule 4002, written notification to the Air District is also required for demolition and asbestos removal activities. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno from a qualified consultant demonstrating that all asbestos containing material has been properly removed and demolition activities may proceed without exposing construction personnel to asbestos related-hazards.
- 4.7-4 In order to reduce human health risks to construction personnel, the project proponent shall retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint prior to demolition. If lead-based paint is observed within existing buildings and the surrounding area, all peeling and flaking lead-based paint shall be removed and properly disposed of separately from building debris, in accordance with current Department of Toxic Substances Control polices. All site soils contaminated by lead-based paint shall be removed and properly disposed prior to any construction activities. Prior to the issuance of a grading permit, the project proponent shall submit written evidence to the City of Fresno or designated representative from a qualified consultant demonstrating that all lead-based paint has been properly removed and that no further health hazards related to lead-based paint exist on-site.

Airport Hazards

The project site is not located within an airport land use plan. The Fresno Yosemite International Airport is located more than five miles southeast of the project site. The Sierra Sky Park Airport, a privately-owned, public-use airport, is located about three miles northwest of the site. The proposed 60-foot high office building would not create any safety hazards to future occupants or airport operations. Since the project is outside all safety hazard and approach zones for the airports, it is not subject to specific lighting, design, or other measures related to air traffic safety. **The project would not impact airport operations.**

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

Development of the proposed project combined with development in the area could increase the use of hazardous substances in the region; however, the incremental increase in hazardous material use from the project would be insignificant. The project site may contain hazardous materials, including asbestos and lead-based paint that could be released during construction activities. Implementation of remediation measures would assure that any contamination on the site is reduced to acceptable levels, thereby avoiding cumulative effects. The potential for cumulative impacts associated with hazardous materials would be minimized by implementation of federal, state, and local requirements regulating the use, storage, and transportation of hazardous materials. Project-specific mitigation measures have been incorporated to ensure that the exposure of the public to environmental hazards is avoided.

The project would not result in a cumulatively considerable incremental effect upon hazards or hazardous materials; therefore, the cumulative impact is less-than-significant.

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4.8 HYDROLOGY & WATER QUALITY

Introduction

The Hydrology and Water Quality section evaluates the potential impacts of the project to hydrology and water quality, and is based on review of the Utility Infrastructure Report & Public Improvements (Lars Andersen & Associates, November 2011), including the applicant's conceptual grading/drainage plan. Information contained in this section was obtained from the California Department of Water Resources (DWR), City of Fresno Urban Water Management Plan (UWMP), California Environmental Protection Agency Central Valley Regional Water Quality Control Board (CVRWQCB), and U.S. Bureau of Reclamation. For a detailed discussion of the UWMP and water supply issues in the City of Fresno and surrounding area, please refer to **Section 4.13 Utilities and Service Systems**.

Setting

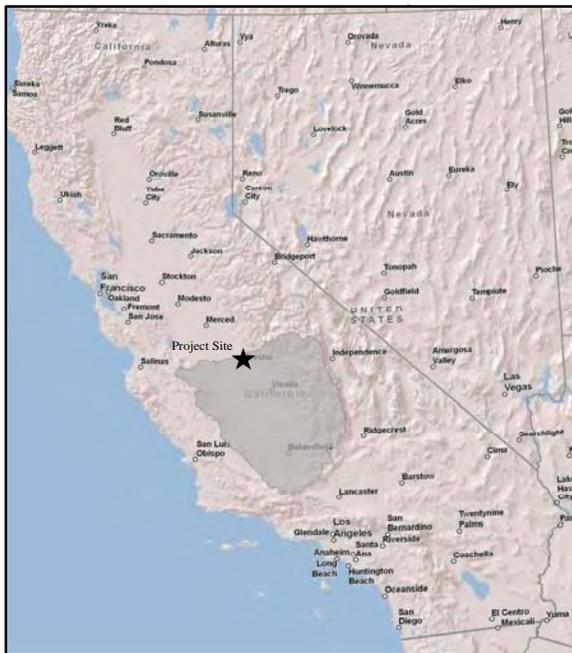
The City of Fresno is located within the Tulare Lake Hydrologic Region, which is one of the 10 hydrologic regions used by the State for water planning purposes.¹ Figure 4.8-1 provides a graphical depiction of the Tulare Lake Hydrologic Region. This area is also referred to as the Tulare Lake Basin for the purposes of watershed-level water quality regulation by the State Water Resources Control Board (SWRCB) and the CVRWQCB. For the purposes of this analysis, these terms are used interchangeably to describe the hydrological character of the region.

The Tulare Lake Basin is one of the three basins that are located within the Central Valley Region of the CVRWQCB. The Tulare Lake Basin (or Tulare Lake Hydrologic Region) covers approximately 10.9 million acres (17,000 square miles). The Basin is part of the Great Central Valley geographic province and the lowland area is included as part of the San Joaquin Valley; this area is commonly referred to as the southern San Joaquin Valley.² The Tulare Lake hydrologic region includes all of Kings and Tulare counties and most of Fresno and Kern counties. The Tulare Lake Basin is essentially a closed basin that is situated in what is described as the topographic horseshoe formed by the Diablo and Temblor Ranges on the west, the San Emigdio and Tehachapi Mountains on the south, and the Sierra Nevada Mountains on the east and southeast. The region has 12 distinct groundwater basins, including seven sub-basins belonging to the San Joaquin Valley Groundwater Basin, which includes portions of the San Joaquin River hydrologic region to the north.

The following discussion provides a general overview of surface water resources and groundwater resources located within the Tulare Lake Basin and Kings Groundwater sub-basin.

¹ California Department of Water Resources. 2003. Bulletin 118-03, *California's Groundwater*. pg.113

² U.S. Environmental Protection Agency, ECORP Consulting, Inc. 2007. *Tulare Lake Basin Hydrology and Hydrography: A Summary of the Movement of Water and Aquatic Species*.



- 124 Basin Number
- 12.01 Subbasin Number
- Basin
- Hydrologic Region Boundaries
- County Lines



Tulare Lake Hydrologic Region

Figure 4.8-1

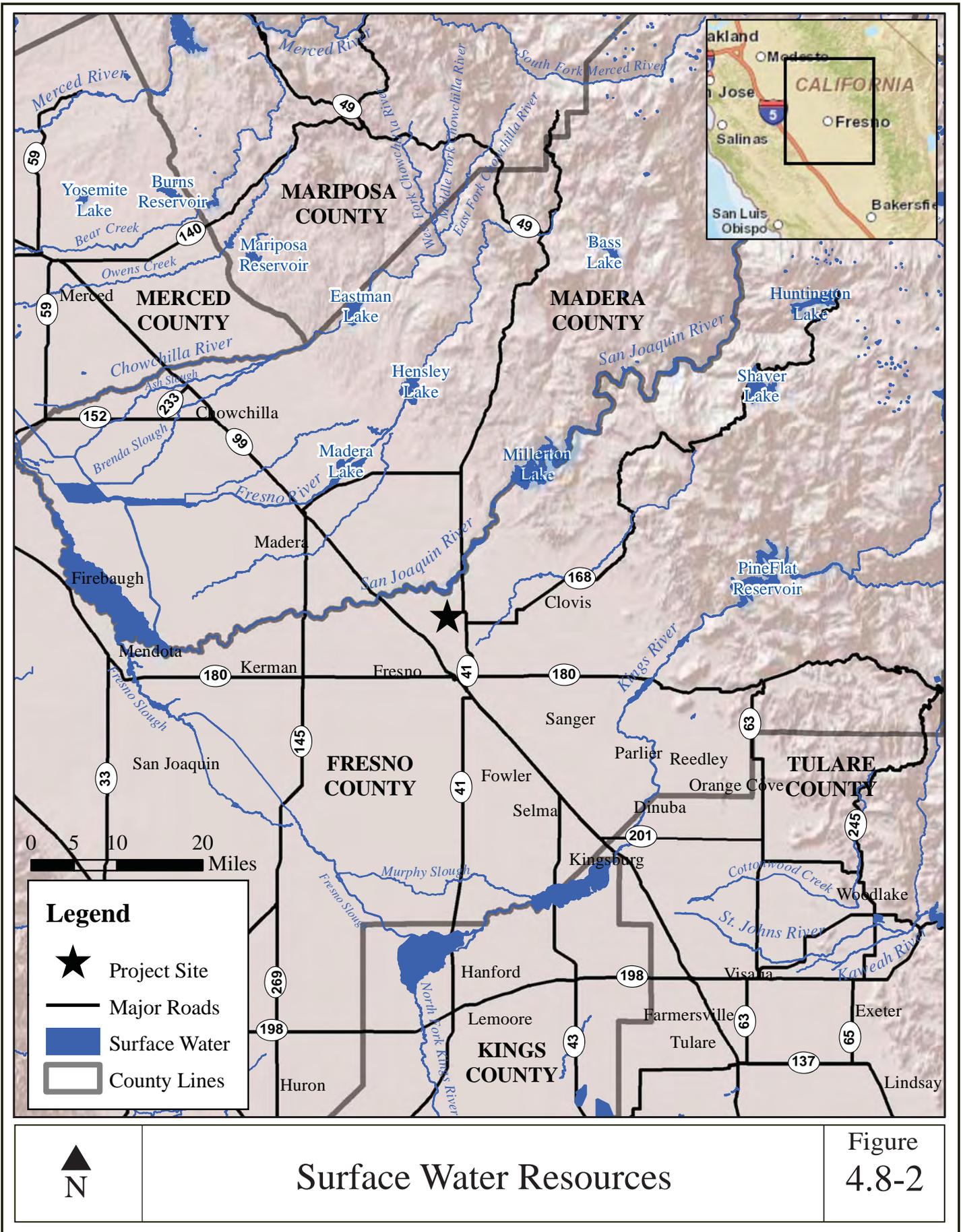
Surface Water Resources

Primary surface water resources within the Tulare Lake Basin include the Kings, Kaweah, Tule, and Kern Rivers; please see to Figure 4.8-2. These rivers drain the west face of the Sierra Nevada Mountains and historically formed broad deltaic fans as they emerge from the foothills and channel bottoms and flowed toward the Basin's terminal lakes: Lake Tulare and Buena Vista Lake. These lakes are natural depressions on the valley floor that historically received flows from these rivers. Today, the terminal lakes have been converted to agricultural uses and have been altered significantly. River impoundments and diversions have also significantly reduced the volume of flows reaching these areas. During time of heavy runoff these areas will receive some flood water from the major rivers. During extremely heavy runoff, flood flows in the Kings River may also reach the San Joaquin River.

The natural hydrography and hydrology of the Tulare Lake Basin has been extensively modified over the course of the past 150 years as a result of irrigation, flood control, and land reclamation projects. Numerous dams and reservoirs have been constructed on each of the four rivers for flood control and water supply purposes; additional dams have also been built on the Kings River for hydroelectric generation. Further modifications and channelization for flood control and groundwater management purposes have also significantly changed the Tulare Lake Basin's hydrography. Both Tulare Lake and Buena Vista Lake have been converted to agricultural uses as a result of increased diversion of river flows for irrigation and water supply purposes.

The Kings River has the largest volume of runoff and the second-largest drainage basin of the four rivers in the Tulare Lake Basin. The Kings River originates high in Kings Canyon National Park and generally trends southwest towards Tulare Lake. Today, the upper and lower reaches of the river are separated by the Pine Flat Dam, which was constructed in 1954. Several tributaries, including Mill Creek and Hughes Creek, contribute winter runoff to the Kings River immediately downstream of the dam. The Kings River generally follows a southwesterly course down into the lowland areas of the Valley where the river splits into several channels. Several canals are located along the Kings River to divert water for irrigation and water supply purposes. Major canals include the Gould, Fresno, and Consolidated Canals, which are diverted downstream of the Friant-Kern Canal. The Fresno and Gould Canals serve the Fresno Irrigation District (FID). Flows in excess of downstream water supply needs are usually diverted into the Fresno Slough, Fish Slough, and James Bypass.

The approximately 32 mile Kaweah River flows from the southernmost part of the Sierra Nevada in Sequoia National Park southwest into the southern San Joaquin Valley. The Terminus Dam, which was constructed in 1962, separates the upper and lower watersheds of the Kaweah River. Several tributaries contribute flows into the Kaweah, including Dry, Yokul, Mehrten, Antelope and Cottonwood Creeks; these creeks provide highly seasonal rain runoff. The main river flow is divided into two branches located approximately three miles downstream of the Terminus Dam; these branches form the St. John's River and Lower Kaweah River. The Friant-Kern Canal, an irrigation supply canal that is part of the Central Valley Water Project, crosses the two branches approximately two miles downstream from their divergence. The main channel of the Kaweah River eventually continues southwest where it joins the Tule River. In wet years, the river occasionally reaches the now-dry Tulare Lake bed.



The Tule River begins in Sequoia National Forest and flows southwest through Porterville, CA. In 1961, Success Dam was constructed on the Tule River and separated the upper and lower watersheds of the Tule River. Numerous channels, sloughs, and ditches divert water from the Tule River for irrigation and groundwater storage purposes. Major ditches and sloughs include the Pioneer ditch, Porter Slough, and Campbell-Moreland, Poplar, and Woods-Central ditches. The Friant-Kern Canal crosses under the Tule River approximately 10 miles downstream of the Success Dam. Water can be released from the Canal into the river. Historically, Tule River emptied into Tulare Lake.

The Kern River is the southern-most of the four major rivers in the Tulare Lake Basin. It originates in Inyo and Sequoia National Forests and Sequoia National Park. It has the largest drainage basin area and carries the second-largest amount of runoff in the Basin. Isabella Dam, located 33 miles east of the foothill boundary in the valley, forms Lake Isabella where the river then begins to flow southwest. The Kern River receives water from the Friant-Kern Canal, which terminates at the river, when excess flows in the San Joaquin, Kings, Kaweah, and/or Tule rivers are put into the Canal. Friant-Kern Canal water is discharged into the Kern River for groundwater recharge purposes and is also diverted into other canals for storage. Kern River flows that are not used for groundwater recharge purposes will flow into the Buena Vista Lakebed, the Kern River Interview and the California Aqueduct, or Tulare Lake via the Kern River Flood Canals. Extensive groundwater recharge efforts occur along the river throughout the lower Kern River alluvial fan area.

The San Joaquin River is located on the northern boundary of the Tulare Lake Basin in the San Joaquin Hydrologic Region. Surface water from the Tulare Lake Basin occasionally drains north into the San Joaquin River during years of extreme rainfall.³ The San Joaquin River originates in the Sierra Nevada and flows westerly forming the border between Fresno and Madera Counties, downstream from Mammoth Pool Reservoir. This watershed drains approximately 15,880 square miles of central California. San Joaquin River flows in the Fresno area are regulated by the U.S. Bureau of Reclamation through releases from Friant Dam. Releases from the dam are the major source of flow in the river in this reach. However, during periods of heavy rainfall, contributions from Cottonwood and Little Dry Creeks, which outfall to the San Joaquin River just below Friant Dam, can be significant. During the summer, fall, and early winter months, releases from Friant Dam are maintained at the lowest levels needed to satisfy riparian water rights downstream (at Gravelly Ford).

Several intermittent and ephemeral surface streams carrying runoff from the Sierra Nevada foothills extend through the City of Fresno. These channels are located between the San Joaquin and Kings Rivers and historically terminated on the Valley floor in the vicinity of Fresno. These streams now flow into the canal system that carries water through the Fresno-Clovis urban area. The principal streams of the watershed are Big Dry Creek, Alluvial Drain, Pup Creek, Dog Creek, Mill Ditch, Redbank Creek, Fancher Creek, Hog Creek, and Mud Creek. Collectively, these streams are referred to as the Fresno Stream Group. Flows occur in these streams primarily in the late fall to early spring period following heavy rainfall in the foothills. The major components of the Fresno Stream Group that formerly caused widespread flooding in Fresno have been contained by impoundment facilities constructed by Fresno Metropolitan Flood Control District (FMFCD). Any water impounded is the subject of a joint water rights application filed by the City of Fresno and other agencies; however, no impounded water from the Fresno Stream Group has yet been placed in beneficial uses.

³ California Regional Water Quality Control Board Central Valley Region. 2004, *Water Quality Control Plan for the Tulare Lake Basin, January 2004*

Groundwater Resources

The City of Fresno is located in the San Joaquin Valley Groundwater Basin, which is comprised of the San Joaquin River Hydrologic Region and the Tulare Lake Hydrologic Region. Please refer to Figure 4.8-3. The Groundwater Basin represents the southern-most extent of the Central Valley regional aquifer system and consists of 16 subbasins. The Tulare Lake Hydrologic Region, which has 12 distinct groundwater basins, includes seven sub-basins of the San Joaquin Valley Groundwater Basin. The City of Fresno is located in the Kings Groundwater Subbasin.

According to DWR, the Kings Subbasin has a surface area of approximately 976,000 acres (1,530 square miles) and underlies Fresno, Kings, and Tulare Counties. The Kings Subbasin is bounded by the San Joaquin River to the north. The Delta-Mendota and Westside Subbasins are located on the Subbasin's western boundary. The eastern boundary represents the alluvium-granitic rock interface of the Sierra Nevada foothills. The southern boundary is adjacent to several irrigation and water districts, including the Empire West Irrigation District, the Laguna Irrigation District, and the Kings County Water District; the southern boundary is also adjacent to the southern fork of the Kings River.⁴

Water bearing formations located within the Kings Subbasin consist of older unconsolidated continental deposits from the Tertiary and Quaternary ages that were overlain by a series of younger deposits from the Quaternary age. These younger deposits, according to DWR, are divided into older alluvium, lacustrine and marsh deposits, younger alluvium, and flood-basin deposits. The older alluvium represents an important aquifer in the subbasin that consists of intercalated lenses of clay, silt, silty and sandy clay, clayey and silty sand, sand, gravel, cobbles, and boulders. These older deposits are considered highly permeable. Finer-grained sediments associated with the Tertiary-Quaternary deposits are encountered below the older alluvium. The City of Fresno has historically relied on groundwater obtained from below the older alluvium.

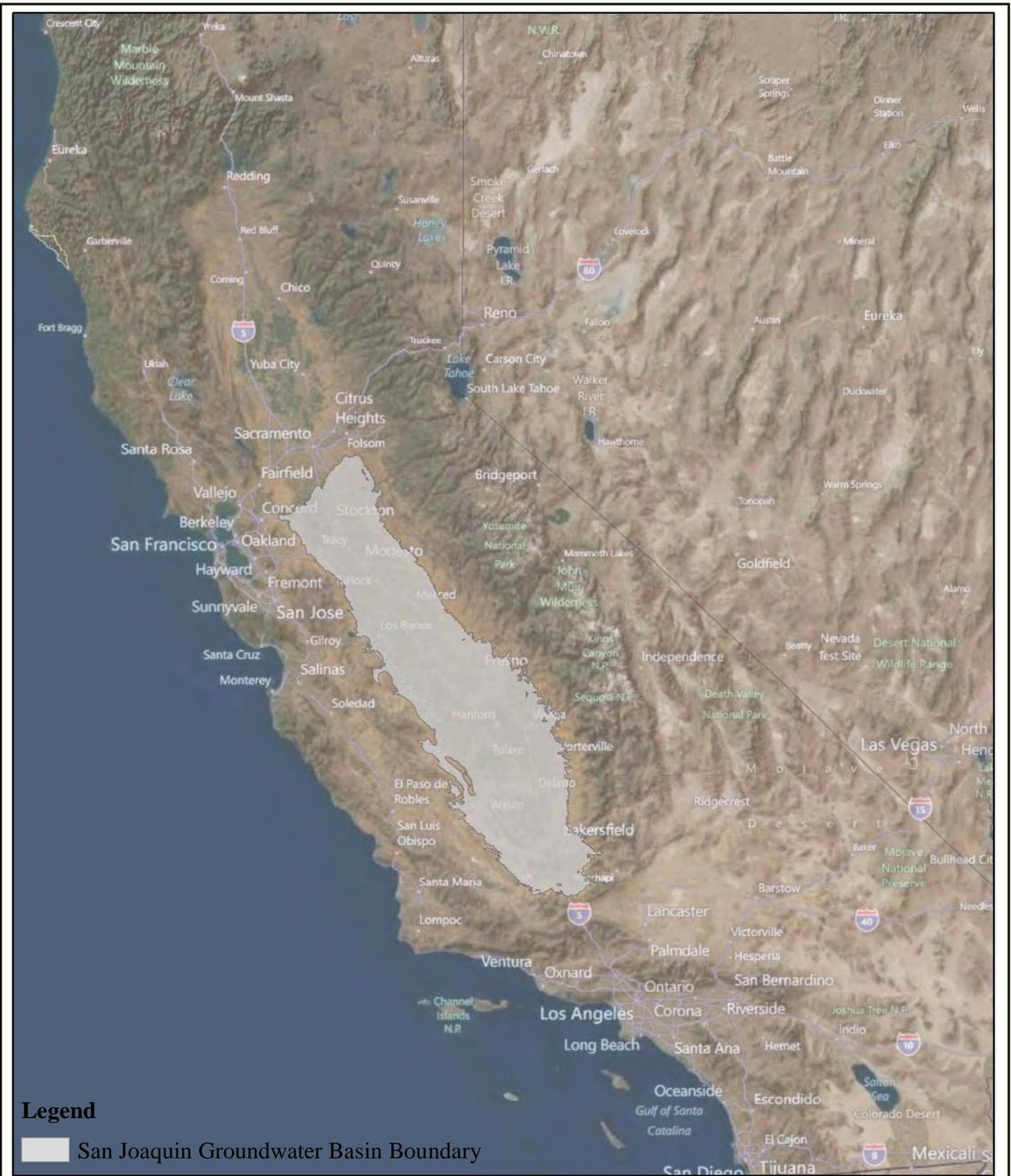
Groundwater flow in the Subbasin generally trends to the southwest. Two notable groundwater depressions exist within the Subbasin; one is centered in the Fresno-Clovis area and the other is located approximately 20 miles southwest of Fresno in the Raisin City Water District. The City of Fresno has also documented two large cones of depression within their service area; one within the City's shallow groundwater zone and another within the City's deep groundwater bearing zone. These depressions are associated with the development of new moderately deep groundwater wells constructed by the City in the late 1980s.⁵ Groundwater levels, particularly within the Fresno area, have declined by an average of 1.5 feet per year since 1990.⁶ DWR identified that the Kings Subbasin was in a state of critical overdraft in the DWR Bulletin 118-80 Ground Water Basins in California, published in 1980. Critical overdraft was defined as when "A basin is subject to critical conditions of overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts."

⁴ California Department of Water Resource. 2006. Bulletin 118-03 Update. *San Joaquin Valley Groundwater Basin Kings Subbasin*. Accessed May 2011.

http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/5-22.08.pdf

⁵ City of Fresno. 2008. *Urban Water Management Plan*. pg. 4-10

⁶ Ibid.



San Joaquin Valley Groundwater Basin

Figure 4.8-3

In 2003, DWR prepared an update to Bulletin 118-80 entitled California's Groundwater Bulletin 118-2003. The update did not re-evaluate the overdraft conditions of the basins and subbasins identified as being in a state of critical overdraft. Bulletin 118-03 did, however, recognize the groundwater recharge efforts were being implemented by the City of Fresno, FID, and others to ensure the reliability of groundwater as a viable water supply. Groundwater recharge efforts are discussed extensively in the City's UWMP and are discussed in further detail within the context of water supply; please refer to **Section 4.13 Utilities** for more information. In addition, please also refer to **Section 4.13 Utilities** for information pertaining to any wells and/or other existing or proposed infrastructure.

Water Quality

According to the CVRWQCB, groundwater quality in the region varies significantly, although it generally meets the primary and secondary drinking water standards for municipal water use. The primary constituents of regional concern within the Tulare Lake Basin are high total dissolved solids (TDS), nitrate, arsenic, and organic compounds. The areas of high TDS are primarily located on the west side of the San Joaquin Valley; high TDS in this area is due to recharge of stream flow originating from marine sediments. High areas of nitrates are known to occur within isolated areas in the Tulare Lake Basin. High arsenic levels have been documented in the Tulare Lake, Kern Lake, and Buena Vista Lake bed areas. Organic compounds from agricultural and industrial uses have also been documented throughout the region.

The City of Fresno has identified several chemical contaminants that affect the City's ability to fully rely on groundwater resources without treatment. Several different types of contaminants have been documented within the portion of the Kings Subbasin that underlies the City's water service area. Major contaminant plumes include 1, 2-Dibromo-3-Chloropropane (DBCP), ethylene dibromide (EDB), trichloropropane (TCP), tetrachloroethylene (PCE), nitrate, manganese, radon, chloride, and iron. Although no specific water quality objectives have been established for the Kings Subbasin, general water quality objectives have been established for the Tulare Lake Basin by the Water Quality Control Board. These objectives are described in the CVRWQCB Water Quality Control Plan for the Tulare Lake Basin, Second Edition, that was revised in 2004. In addition, specific objectives have been developed by the U.S. Environmental Protection Agency related to the City of Fresno Sole Source Aquifer, which is the primary source of groundwater for Fresno.

Drainage and Flood Protection

The Fresno Metropolitan Flood Control District (FMFCD) is the agency responsible for regulating flooding and storm water drainage within the project area. The FMFCD is located in the north-central portion of Fresno County between the San Joaquin and Kings rivers, and is authorized to control storm waters within an urban and rural foothill watershed of approximately 400 square miles. The FMFCD service area includes most of the Fresno-Clovis metropolitan area and unincorporated lands to the east and northeast.

Storm water runoff in the City of Fresno is conveyed primarily by street-side curbs and gutters into a comprehensive network of public FMFCD ponding basins. Public and private basins are designed to have sufficient capacity for the most commonly expected storm intensities. Storm flows directed into these basins is typically percolated back into the aquifer to help provide for recharge.

The project area has been developed with commercial, office, and residential uses and does not contain any drainages or waterways. The nearest waterway is the San Joaquin River, located

approximately three miles to the north of the project site. The property is not located within the 100-year floodplain or any flood hazard zones; the project site is located in Zone X of the FEMA Map (panel 1570 of 3525 dated February 18, 2009).

Existing storm drainage systems exist on and in the vicinity of the project site. The FMFCD currently maintains a 24" storm drain line with curb inlet along the project's frontage on the south side of W. San Jose Avenue. There is also an existing privately-maintained catch basin connected to an 18" storm drain lateral located approximately 11 feet west and 30 feet south of the northwest corner of the project property within the adjacent Fig Garden Financial Center parking lot. Sheet drainage flow from the project site that is not collected in the above systems drains into the existing storm drains located in the W. Scott Avenue cul-de-sac and the W. San Jose Avenue and Nantucket Avenue intersection. Please refer to Appendix I for more information concerning drainage.

Regulatory Environment

Safe Drinking Water Act. The Federal Safe Drinking Water Act regulates drinking water quality and provides the U.S. Environmental Protection Agency authority to establish drinking water standards. The National Primary Drinking Water Regulations (NPDWRs) protect drinking water by limiting the levels of contaminants that may cause adverse public health effects. All public water systems with a service population of 25 or more are required to meet the NPDWRs, monitor for contaminants, and report to the EPA any exceedances of these standards. In California, the State Department of Health Services (Division of Drinking Water and Environmental Management) is responsible for implementation of the Safe Drinking Water Act.

Federal Clean Water Act. The Federal Clean Water Act was enacted to govern and protect water quality as codified in 33 USC 1251-1376. The Clean Water Act contains statutes for regulating pollutant discharges into waters of the U.S. and grants the EPA authority to implement and enforce pollution control programs. Sections 303, 304, and 402 provide water quality standards, criteria, and guidelines, including the requirements under the National Pollutant Discharge Elimination System that are relevant to the proposed project, as described further below.

Porter-Cologne Water Quality Act. The basis for the water quality regulation in California is the Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.). This Act requires a "Report of Waste Discharge" for any discharge (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of the state's surface or groundwater. Based on the reports, the local (RWQCB) issues waste discharge requirements to minimize the effect of the discharges. The Porter-Cologne Act delegates authority to the State Water Resources Control Board to establish regional water quality control boards. The Central Valley RWQCB has authority to use planning, permitting, and enforcement to protect beneficial uses of water resources in the City of Fresno. The RWQCB has established the Water Quality Control Plan for the Tulare Lake Basin (adopted 1995, revised 2004) to implement policies and provisions for water quality management in the region.

National Pollutant Discharge Elimination System. The 1987 Amendments to the Federal Clean Water Act require that stormwater discharges to waters of the U.S. be regulated under the National Pollution Discharge Elimination System (NPDES). The State Board has taken the permitting option of issuing a statewide General Permit, issuing the draft General Permit in 2001. The RWQCB oversees the statewide General Permit regarding management of stormwater runoff from construction sites over one acre in size. Provisions of the Statewide Permit require that: discharges of material other than stormwater into waters of the U.S. are prohibited; stormwater

discharges not cause or threaten to cause pollution, contamination, or nuisance; and stormwater discharges not contain hazardous substances. The Statewide Permit also requires implementation of Best Management Practices (BMPs) to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure or device that controls, prevents, removes or reduces discharge of pollutants into bodies of water.

Fresno Metropolitan Flood Control District (FMFCD) Service Plan. The FMFCD constructs, operates, and maintains the drainage and flood control system within the Cities of Fresno, Clovis, and some outlying areas. The FMFCD, together with the City of Fresno, are responsible for assuring compliance with the requirements of the statewide NPDES permit related to storm water discharges at the project site, pursuant to the California Regional Water Quality Control Board, Central Valley (NOPDS Permit CA0083500 and Board Order No. 5-01-048). The FMFCD Service Plan identifies programs, policies, and regulations controlling runoff, flood control, and storm water quality within the project area and City of Fresno.

Storm Water Quality Management Program. In compliance with the federal Clean Water Act and implementing storm water permit regulations, the FMFCD and five other local public agencies (County of Fresno, City of Fresno, City of Clovis, CSU Fresno, and Caltrans) developed a Storm Water Quality Management Program to be implemented in the Fresno-Clovis Metropolitan area. The program was submitted to the Central Valley Regional Water Quality Control Board as a part of the NPDES municipal storm water permit process. The RWQCB incorporated into the permit specific program requirements, including best management practices to prevent and reduce storm water pollutants. The NPDES permit was issued to the participating agencies in September 1994, and was scheduled expire in September 1999. In September 2005, the District prepared an application for renewal of the NPDES permit, including assessment of the current program. The permit renewal included four co-permittees: County of Fresno, City of Fresno, City of Clovis, and CSU Fresno. Caltrans was removed from the MS4 permit in the 2001 permit since they were required to get a statewide permit. The new NPDES permit went into effect in 2010.

2025 Fresno General Plan. The General Plan contains policies related to hydrology and the protection of water quality. An analysis of the project's consistency with relevant policies of the General Plan is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- violate any water quality standards or waste discharge requirements;
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- otherwise substantially degrade water quality;
- place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- place within a 100-year flood hazard area structures which would impede or redirect flood flows; or
- expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

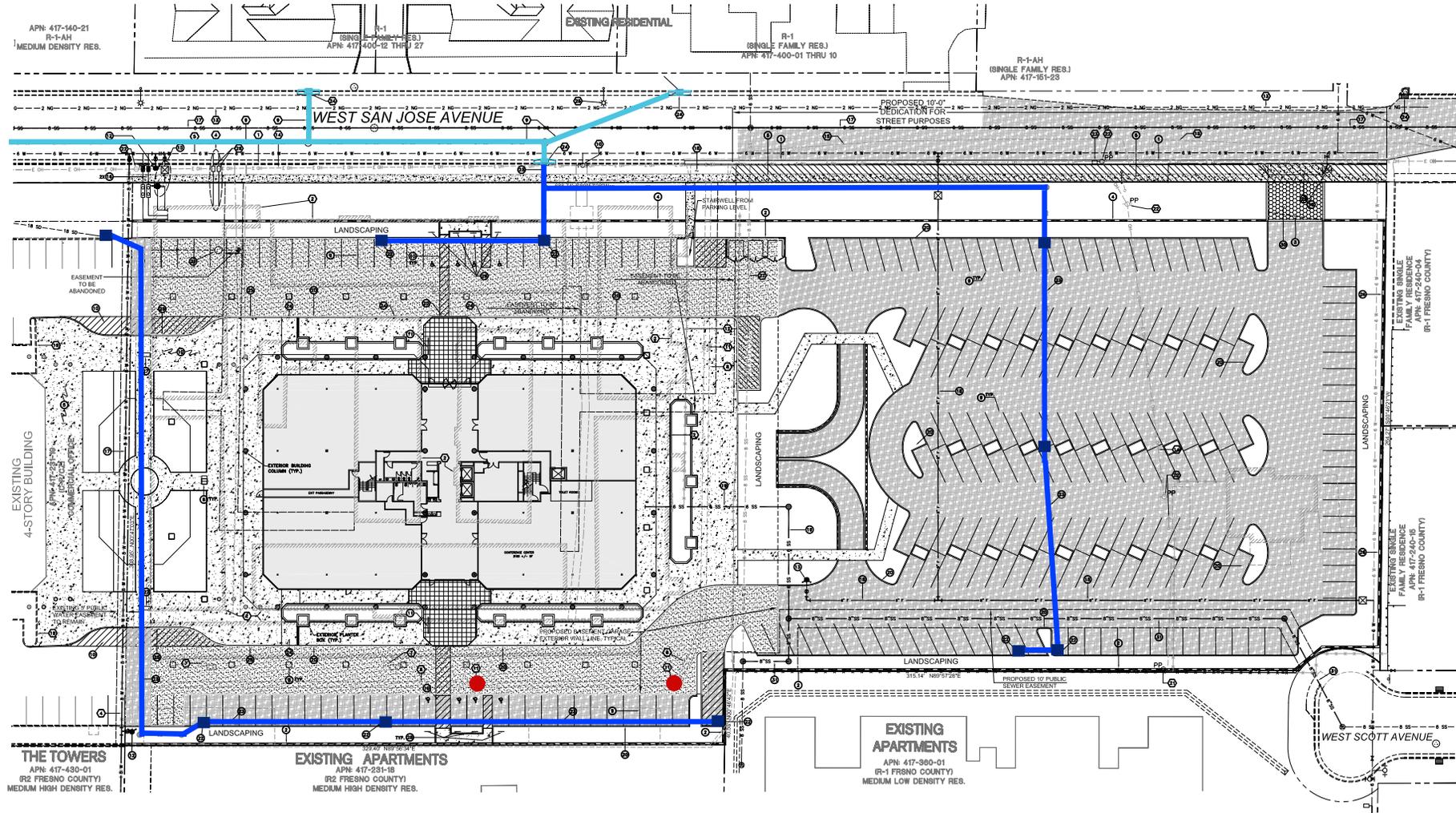
Impacts and Mitigation

Flooding/Drainage Impacts

The project site is currently developed with a former apartment complex, parking areas, and landscaping; a portion of the site was previously developed with a single-family residence, but that structure has since been removed. The central portion of the site is vacant. The area of proposed disturbance for the project site is approximately 4.69 acres. The property is currently covered with approximately 91,000 square feet of existing impervious surfaces, in the form of existing building footprints and pavement. The project would result in a total of about 169,448 square feet of impervious surfaces, which represents a net increase of about 70,448 square feet of impervious area compared with existing conditions. The additional impervious area would increase runoff flows. Drainage calculations prepared for the project indicate that the pre-development runoff flows from the site would be about 2.04 cubic feet per second (cfs) for the 2-year storm.

The proposed drainage/grading plan for the project site is presented in Figure 4.8-4. No new off-site storm drain line is anticipated, aside from the required gravity storm drain lateral stub for the proposed building structures and on-site peak-reducing storm drain facilities. The proposed gravity storm drains will be connected to the existing curb inlet located at W. San Jose Avenue. A storm drain sump pump will also be installed in the basement parking garage for the drainage of the proposed fire pump room. This will discharge into the existing privately maintained catch basin, located at the adjacent Fig Garden Financial Center's parking lot.

Since the project would increase peak runoff flows from the site, a peak-reducing storm drain facility would be installed to reduce runoff flows to pre-development levels and eliminate potential adverse impacts on the existing storm drain system. This peak-reducing storm drain facility may consist of a large sump and/or detention pond, an underground detention pipe system, or some combination of the two, to be privately maintained and located on-site. The preliminary peak-reducing volume is calculated at 1.0 cfs. The location and type of the planned peak-reducing system would be evaluated by the FMFCD and designed accordingly during preparation of final construction plans for the project.



LEGEND:

- Existing Storm Drain to Remain
- ▭ Existing Curb Inlet to Remain
- Existing Storm Drain Catch Basin to be Removed
- Proposed Storm Drain Catch Basin
- Proposed Storm Drain

Source: Lars Andersen & Associates, 2011



Drainage Improvements

Figure 4.8-4

FMFCD encourages, but does not require, that roof drains be constructed such that they are directed onto and through a landscaped grassy swale area to filter out pollutants from roof runoff. Direct discharge connection of swimming backwash to the storm drain is not permitted and will be directed onto and through a landscaped grassy swale area or similar. Swimming pool management would be required to comply with applicable state and federal regulations.

With implementation of the proposed drainage facilities, the pre-development runoff flows would be maintained at 1.28 cfs, representing no net increase in runoff flows, based on the 2-year storm.

The project would not alter the existing drainage patterns in the area. The project would increase the amount of impervious surfaces on the project site compared with existing conditions; however, detention facilities are proposed to reduce post-development runoff flows to pre-development levels. The post-development flows from the project site are designed to serve medium high density and medium low density residential uses. The existing Master Plan storm drainage facilities do not have capacity to serve the proposed office commercial land use. The project shall be required to mitigate the impacts of the increased runoff from the proposed office commercial land use to a rate that would be expected if developed to the medium high density and medium low density residential. The project may either make improvements to the existing pipeline system to provide additional capacity or may use a permanent peak reducing facility in order to eliminate adverse impacts on the existing system. In order to ensure that the project does not increase runoff flows from the site, the project applicant will submit final drainage plans showing all drainage facilities, including the location and type of peak-flow reducing system, subject to review and approval by the City of Fresno and FMFCD, prior to the issuance of a building permit.

The project site is not located within any flood hazard zones and no floodplain management restrictions apply to this area. All post-development runoff flows associated with increased impervious surface areas would be detained on-site and no off-site flooding would occur in connection with site development. The project, therefore, would not expose people or structures to flood hazards or impede flood flows.

Based on the above discussion, the project would not result in significant drainage or flooding impacts.

Water Quality and Storm Water Management

In the short-term, construction activities could impact water quality through erosion of exposed soils and sedimentation of receiving waters. Other pollutant sources that can be released during construction activities include oil, grease, and heavy metals from equipment, and use of paints and solvents. Improper management of construction materials can result in the release of such contaminants in storm runoff.

In the long term, surface runoff from operation of the proposed development could introduce urban pollutants affecting water quality. These sources include oil, grease, and trace metals from vehicles using parking areas and driveways; release of fertilizers, pesticides, and herbicides from landscaped areas; and use of everyday contaminants during maintenance activities.

The area of disturbance for the proposed office building is essentially flat and runoff would be directed into the existing surrounding streets and ultimately into the existing FMFCD maintained storm drain system. Storm water management on the project site during and after construction will be specified in the project's Storm Water Pollution Prevention Plan (SWPPP). A Notice of Intent (NOI) to perform work under the permit must be filed with the state. Similarly, the NPDES

Permit requires the preparation of Temporary Erosion, Sediment and Dust Control Plan in compliance with Local, State, Federal and San Joaquin Air Pollution Control District regulations and requirements. In addition, an Erosion, Sediment and Dust Control Plan would be prepared in accordance with the City's Grading and Erosion Control Ordinances. Typical Best Management Practices (BMPs) include the following measures:

- Preservation of existing vegetation
- Vehicle and equipment cleaning
- Silt fence, sediment trap, fiber rolls, sandbag barriers
- Street sweeping and vacuuming
- Storm drain inlet protection
- Stabilized construction entrance/exit and roads
- Entrance tire wash outlet
- Wind erosion control
- Proper material delivery and storage
- Detection and reporting of illicit connection/illegal discharge
- Proper vehicle and equipment maintenance
- Water conservation practices
- Stockpile management
- Spill prevention and control
- Solid waste management
- Hazardous materials management

The project could result in impacts to surface water quality during construction and operation that would be reduced to a less-than-significant level through the compliance with the City's Grading and Erosion Control Ordinance and implementation of standard BMPs. The following mitigation measure would ensure that impacts are further reduced to a less-than-significant level.

Impact **Construction and operation of the project could impact surface water quality. This is a significant impact that would be reduced to a less-than-significant level with the following mitigation.**

Mitigation

4.8-1 Prior to the issuance of a grading permit, the project applicant shall obtain a National Pollution Discharge Elimination System Program General Construction Permit from the State Water Resources Control Board and provide evidence of such permit to the City of Fresno.

Groundwater

The project does not propose any wells on the site; the City of Fresno Department of Public Utilities Water Division has determined that no new or expanded water supply facilities are necessary to serve the project (personal communication, Michael Carbajal, August 2011). The project's potential impacts related to water supply and groundwater resources (to the extent that groundwater represents the City's primary source of supply) are more appropriately addressed within the context of the adequacy of existing water supply infrastructure in the project area. Please see **Section 4.13 Utilities and Service Systems**. Water service would be provided to the project by the City of Fresno.

Project demands for groundwater resources in connection with the proposed project would not substantially deplete groundwater supplies and/or otherwise interfere with groundwater recharge efforts being implemented by the City of Fresno. The proposed project is not anticipated to result in additional demands for groundwater resources beyond those considered in the 2008 UWMP. The project would result in less water demand than anticipated in the 2008 UWMP based on the site's existing land use designation. The project would, however, increase demand for groundwater resources beyond existing levels. As discussed in **Section 4.13 Utilities and Service Systems**, current on-site water use is primarily associated with exterior landscaping and maintenance requirements. No interior water use is currently associated with the existing, vacant, apartment complex.⁷ As a result, the project would potentially affect groundwater resources by increasing on-site water use as compared to current on-site use.

While the project would increase demand for groundwater resource beyond current levels, the project would utilize significantly less water than the water demand projections contained in the 2008 UWMP with respect to development of this site. Therefore, the project's water demands were effectively considered under the terms of that UWMP. Based on the assumptions in the City's UWMP, the project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP are intended to reduce demands on groundwater resources by augmenting supply and introducing conservation measures and other mitigation strategies. A detailed analysis of the project's potential water demand is contained in **Section 4.13 Utilities and Service Systems** within the context of water supply.

The proposed project would not substantially deplete groundwater resources such that a significant environmental impact would occur. Project construction could result in groundwater quality effects due to existing on-site water wells, which may not have been properly abandoned. In order to avoid potential water quality impacts, the following mitigation measure is necessary. This mitigation measure will ensure that any existing abandoned wells located on-site have been properly abandoned in accordance with all applicable state and local requirements. **Overall, the project would not significantly impact ground resources; the following mitigation will ensure all impacts are less-than-significant.**

Impact **Construction and operation of the project could impact groundwater quality. This is a significant impact that would be reduced to a less-than-significant level with the following mitigation.**

⁷ CEQA Guidelines §15125(a) identifies that the existing environmental setting (at the time that the Notice of Preparation is prepared) should normally constitute the baseline against which an agency assesses the significance of project impacts. The Courts, however, have recognized that an alternate baseline may be appropriate in specific circumstances provided that the baseline is supported by substantial evidence (e.g., see *Cherry Valley Pass Acres and Neighbors v. City of Beaumont*). For the purposes of this analysis, this EIR uses the site's current water use, which is limited to exterior landscaping/maintenance requirements, as the CEQA baseline.

Mitigation

- 4.8-2 Prior to the issuance of a grading permit, all existing on-site wells shall be located to determine that they have been properly abandoned in accordance with state and local requirements. The project applicant shall submit evidence to the City of Fresno documenting compliance with this measure. If any on-site wells have not been appropriately abandoned, remedial procedures shall be implemented to properly abandon the wells in accordance with state and local requirements.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard community area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

Cumulative development within the watershed could increase the amount of impervious surfaces, thereby increasing storm water runoff rates in the area. Development of the project includes storm drain facilities in accordance with all local regulations, and would not result in significant impacts to hydrology or flooding conditions. The project, therefore, would not contribute to cumulative hydrological impacts.

Cumulative development and increases in localized runoff could introduce urban pollutants into the drainage system and receiving water bodies, impacting water quality. The project proposes BMPs to remove pollutants from storm water before it enters surface waters. The onsite drainage system and BMP measures would avoid offsite, cumulative water quality impacts.

The project would not result in a cumulatively considerable incremental effect on hydrology and water quality; therefore, the cumulative impact is less-than-significant.

4.9 LAND USE & PLANNING

Introduction

The following section analyzes the project's potential land use effects, specifically its consistency with policies contained in applicable planning documents. The analysis presented in this section addresses the project in terms of the project's consistency with applicable land use policies and regulations pertaining to the development of the project site. The following documents were reviewed during the preparation of this section:

- 2025 Fresno General Plan
- 2025 Fresno General Plan Master EIR
- City of Fresno Municipal Code
- 1988 Bullard Community Plan

The physical effects associated with the proposed project, including the effects of the proposed land use amendments, are addressed in the appropriate topical CEQA sections contained in this EIR (e.g., biological resources, transportation, public services, etc.). For a detailed discussion of the project's physical effects on such resources, please refer to those sections for more information.

Setting

The project site is located within the Bullard Community Planning area in the City of Fresno, California as shown in Figure 4.9-1. The project site is situated near the northeast corner of Palm Avenue and Shaw Avenue, and is bounded by N. Palm Avenue to the west, W. San Ramon Avenue, N. Colonial Avenue and W. San Jose Avenue to the north, the Fig Garden Village shopping center to the southwest, and single- and multi-family residential development to the north, south, and east. The 4.69-acre project site is located entirely within the City of Fresno; the site is currently designated as Medium Low Density and Medium High Density according to the 2025 Fresno General Plan (see Figure 4.9-2). The site's existing zoning designations are presented in Figure 4.9-3. Refer also to Table 4.9-1 for a summary of proposed land use changes.

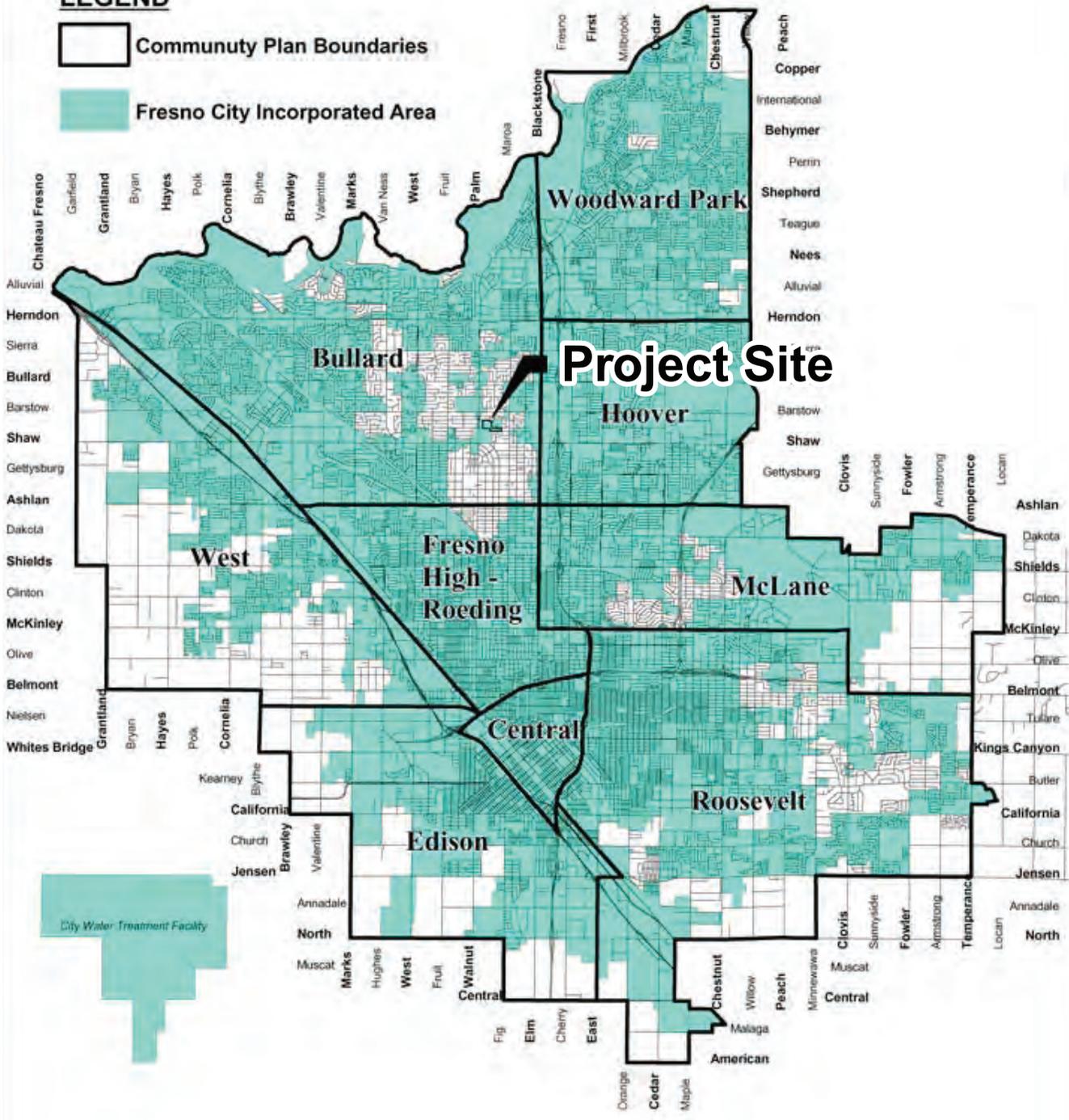
The project site is surrounded by single- and multi-family residential development to the north, south, and east (refer to Figure 4.9-2 and 4.9-3). Single-family residential development within the City of Fresno lies to the north. Residential uses within the unincorporated area of Fresno County are also located immediately adjacent to portions of the project site. Specifically, single family residential uses within the County of Fresno are located to the south and east of the site. The Fig Garden Financial Center is located west of the site and the Fig Garden Village commercial shopping center is located south of the Financial Center.

As described in Section 3.0 Project Description, the proposed project consists of incorporating the proposed office complex into the existing Fig Garden Financial Center. The proposed office building structure would be designed to be consistent with the predominant character and scale of the architecture of the adjacent Fig Garden Financial Center. Uses surrounding the existing Financial Center include residential uses within the County to the north and commercial uses within the City of Fresno to the south. The project also entails the construction of an underground parking structure. The physical development of the site also includes several land use amendments to accommodate the project.

LEGEND

 Community Plan Boundaries

 Fresno City Incorporated Area



Bullard Community Plan

Figure 4.9-1

Legend

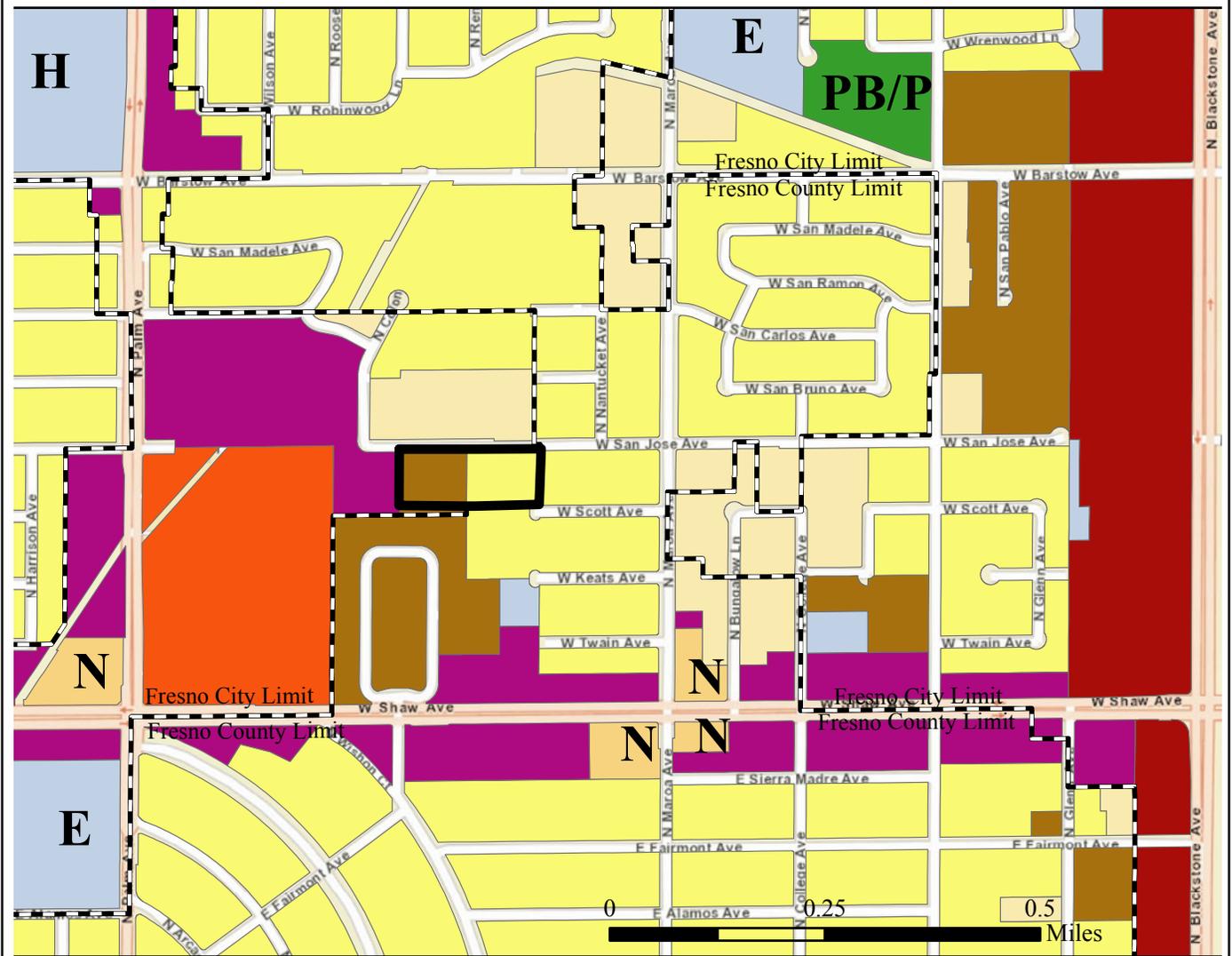
-  Project Site
-  City/County Border
- General Plan Designation**
-  Community
-  General-heavy
-  Neighborhood
-  Office Commercial
-  Ponding Basin (Park Use)
-  Parking
-  Elementary School
-  High School
-  Residential Medium Low Density (2.19-4.96 DU/acre)
-  Residential Medium Density (4.99-10.37 DU/acre)
-  Residential Medium High Density (10.38-18.15 DU/acre)



Existing Land Uses on Project Site:

-  Residential Medium Low Density (2.19-4.96 DU/acre)
-  Residential Medium High Density (10.38-18.15 DU/acre)

Uses planned according to the City General Plan and Bullard Community Plan. County land uses may differ.



Existing General Plan Designation

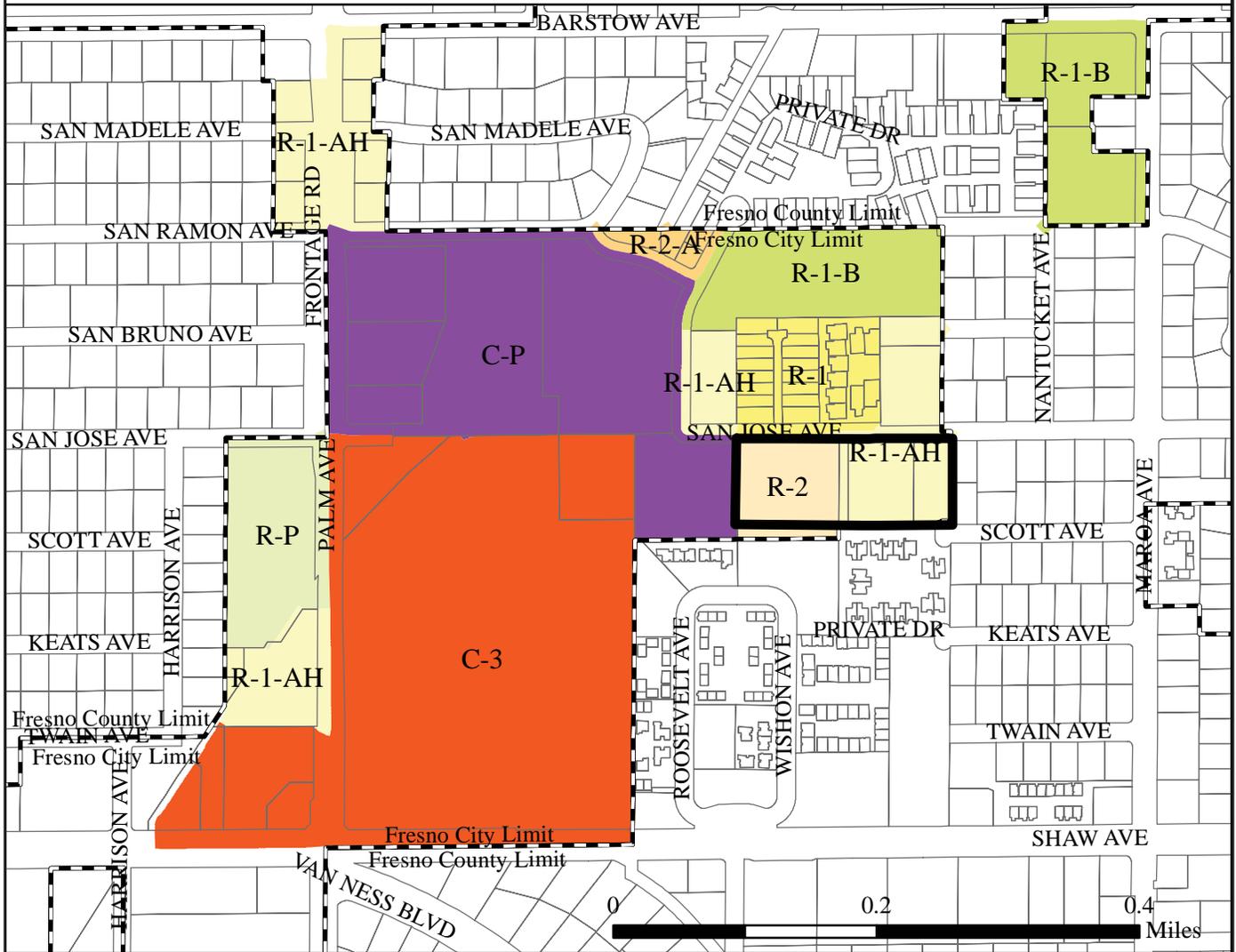
Figure 4.9-2

Legend



	Project Site	Zoning Designation		R-1-AH	
	City/County Border		C-3		R-1-B
			C-P		R-2
			R-1		R-2-A
					R-P

Uses planned according to the City General Plan and Bullard Community Plan. County land uses may differ.



Existing Zoning Designation

Figure
4.9-3

The proposed project consists of the following entitlement applications and land use elements:

- 2025 Fresno General Plan Amendment (A-07-21): Amend the 2025 Fresno General Plan and Bullard Community Plan to change the land use designation for the project site from *Medium Low Density* and *Medium High Density Residential* to *Office Commercial* as summarized in Table 4.9-1 below.
- Rezone: Rezone the project parcels from R1-AH (Single-Family Residential District, Horses) and R-2 (Low Density Multiple Family Residential District) to C-P (Commercial-Professional).
- Conditional Use Permit (No. C-11-XXX): Conditional Use Permit pursuant to §12-216.3(B)(5) in order to allow the construction of an office structure in excess of 35 feet in height. Fresno Municipal Code §12-216.5(D)(1)(a) identifies that a building or structure may exceed 35 feet in height, but not exceeding sixty feet, may be erected subject to securing a Conditional Use Permit pursuant to §12-405 and §12-406.
- Vesting Tentative Map (P-2008-07): Application to merge the three (3) project parcels into a single parcel and subsequently adjust the parcel line between the project site and adjacent Fig Garden Financial Center as described in the Amended Vesting Tentative Map Application P-2008-07.
- Minor Site Plan Amendment: Amend the site plan for the existing approved site plan for an adjacent property (5200 North Palm) to conform that parcel's site plan to the Tentative Parcel Map and the improvements proposed in the project's site plan.

Table 4.9-1 below summarizes existing and proposed land use designations. The proposed rezoning and General Plan amendments would be applicable to the 4.69-acre project site. Please refer to Figure 4.9-4 for a graphical representation of the proposed zoning for the project site.

Table 4.9-1 Existing and Proposed Land Use Designation					
APN	Existing		Proposed		Acres
	Zoning Designation	General Plan Designation	Zoning Designation	General Plan Designation	
417-231-19	C-P/CZ	Commercial Office	-	-	2.44
417-240-03	R1-AH	Residential Medium Low Density	C-P/CZ	Commercial Office	0.73
417-240-37	R1-AH	Residential Medium Low Density	C-P/CZ	Commercial Office	1.42
417-231-16	R-2	Residential Medium High Density	C-P/CZ	Commercial Office	2.35
417-231-17	R1-AH	Residential Medium Low Density	C-P/CZ	Commercial Office	0.19
Total Acres:					7.13
Total Acres to be Rezoned & Amended					4.69
Source: Scott A. Mommer, Lars Andersen & Associates, Inc., June 2011, as amended November 2011					

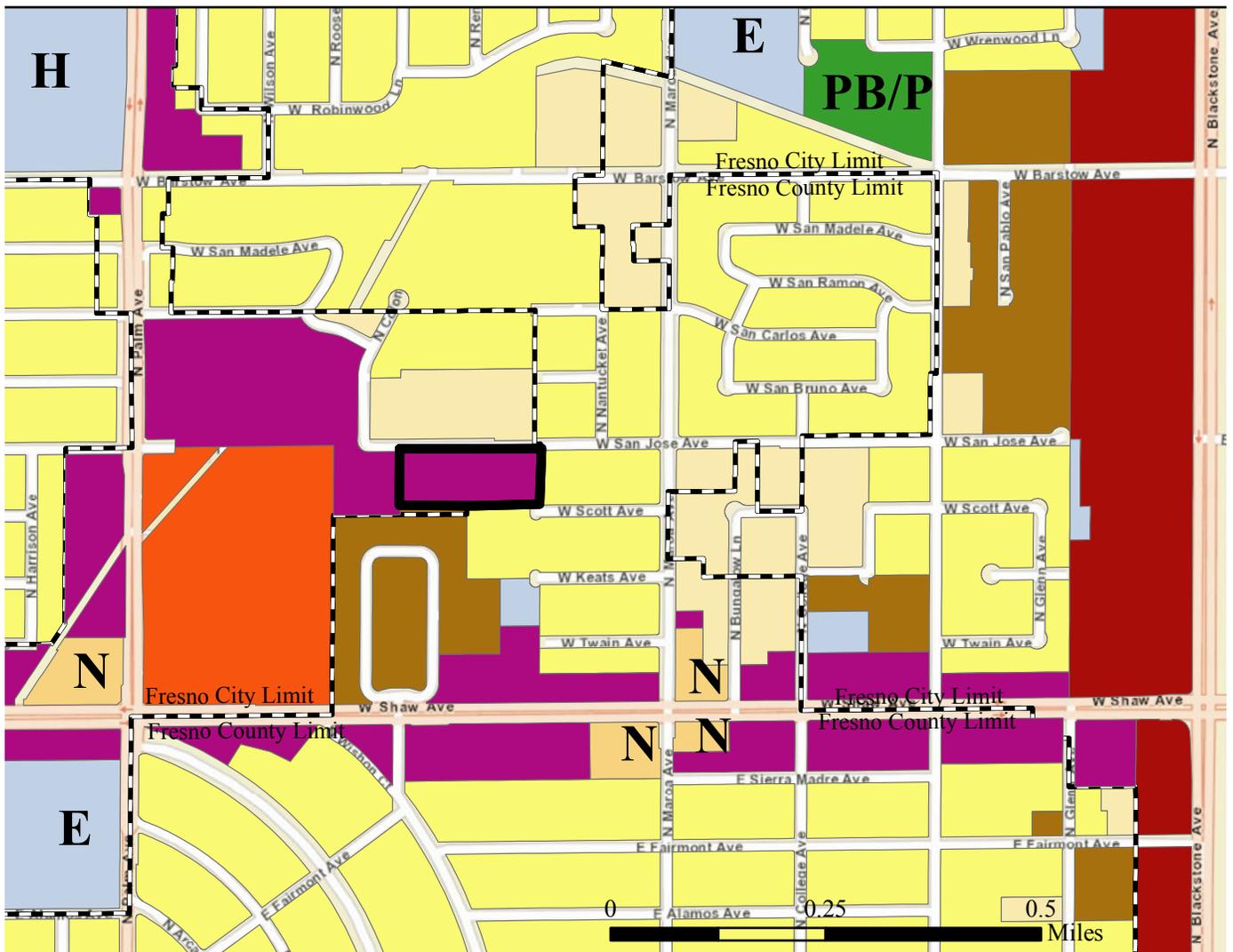
Legend

-  Project Site
-  City/County Border
- General Plan Designation**
-  Community
-  General-heavy
-  Neighborhood
-  Ponding Basin (Park Use)
-  Parking
-  Elementary School
-  High School
-  Residential Medium Low Density (2.19-4.96 DU/acre)
-  Residential Medium Density (4.99-10.37 DU/acre)
-  Residential Medium High Density (10.38-18.15 DU/acre)

Proposed Land Use on Project Site:

-  Office Commercial

Uses planned according to the City General Plan and Bullard Community Plan. County land uses may differ.



Proposed Land Use Designation

Figure 4.9-4

Regulatory Environment

2025 Fresno General Plan. Pursuant to California Government Code Section 65300, each city is required to adopt a comprehensive General Plan to guide the physical development of the Community. The 2025 Fresno General Plan consists of goals, policies, and implementation measures for the physical development of the City. The proposed project site is located entirely within the City of Fresno and the project site is designated for *Medium-High Density* and *Medium-Low Density* residential uses. Figure 4.9-2 provides a graphical representation of the site's existing General Plan Designation in relation to surrounding land uses. According to the 2025 Fresno General Plan, residential land use is the dominant land use in the metropolitan area and accounts for 33% of all land area within the City's sphere of influence.

City of Fresno Zoning Ordinance. The proposed project is located entirely within the City of Fresno. The proposed project entails rezoning the project site to C-P (Commercial-Professional). The site is currently zoned for single- and multi-family residential uses. Specifically, the site is currently located within a *Single-Family Residential (Horses) District (R-1-AH)* and a *Low-Density Residential District (R-2)*. Figure 4.9-3 provides a graphical representation of the project site's existing zoning designations. Allowable uses within these zoning districts generally include single- and multi-family residential uses, in addition to agriculturally oriented uses for the R-1-AH district.

1988 Bullard Community Plan. The City of Fresno is divided into nine Community Plan areas, which were updated during the adoption of the 2025 Fresno General Plan. The proposed project site is located within the boundaries of the Bullard Community Plan, which encompasses an area of approximately 24 square miles within the northwestern portion of the Fresno Metropolitan area, including unincorporated areas of Fresno County. Please refer to Figure 4.9-4. The goals, objectives, and policies of the Community Plan focus on the local issues affecting land uses in the Bullard Community while remaining consistent with the City of Fresno 2025 General Plan. The Community Plan describes and designates various land uses within its planning area and identifies appropriate policies and standards which address local land use issues related to transportation and circulation, water supply, wastewater services, resource management, public services, and housing. The intended purpose of the Bullard Community Plan is to provide for an internally compatible land use pattern that can be adequately accommodated by City services and infrastructure capacity. Moreover, the Bullard Community Plan is intended to ensure that future development within the planning area will enhance the existing community and character. Single-family residential uses are considered the dominant land uses within the Community Plan area.

San Joaquin Valley Blueprint. The San Joaquin Valley Blueprint planning process is a joint effort of the Council of Fresno Governments and eight other local agencies, formed with the goal of developing a cohesive regional framework that defines and offers alternative solutions to growth-related issues for the entire Central Valley. The process involves the integration of transportation, housing, land use, economic development, and the environment to produce a preferred growth scenario to the year 2050. It's primary recommendation is the adoption of a future growth scenario and 12 Smart Growth Principles, as follows: 1) create a range of housing opportunities and choices; 2) create walkable neighborhoods; 3) encourage community and stakeholder collaboration; 4) foster distinctive, attractive communities with a strong sense of place; 5) make development decisions predictable, fair, and cost-effective; 6) mix land uses; 7) preserve open space, farmland, natural beauty, and critical environmental areas; 8) provide a variety of transportation choices; 9) strengthen and direct development towards existing communities; 10) take advantage of compact building design; 11) enhance the economic vitality of the region; and 12) support actions that encourage environmental resource management.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- physically divide an established community;
- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- conflict with any applicable habitat conservation plan or natural community conservation plan;
- induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impacts and Mitigation

Physically Divide an Established Community

For the purposes of the following analysis, the division or disruption of the physical arrangement of an established community would occur if a project creates a physical barrier that would physically separate or divide portions of a built community. For instance, the construction of a new freeway through an existing neighborhood or community has the potential to create a physical barrier that would divide and thereby separate/isolate portions of a community. In the absence of mitigation, this would constitute a significant environmental effect under CEQA.

A number of comment letters received during the Notice of Preparation (NOP) review period identified concerns that the proposed project would disrupt the existing nature of the surrounding community by introducing new commercial/office uses within a predominantly low density residential neighborhood. As shown in Figures 4.1-1, 4.9-2, and 4.9-3, the project site is generally surrounded by low-density residential uses to the north, medium-low density residential to the east, medium-high and medium-low density residential uses to the south, and commercial uses to the west and southwest. The proposed project and associated land use changes (i.e., General Plan and Zoning Map amendments) would potentially separate and/or divide the existing community if it would 1) physically separate a portion of the community by removing functional open space, or 2) create a physical barrier that would isolate portions of the neighbor from previously accessible areas.

The proposed change in land use designation does not, in and of itself, represent a physical barrier dividing an established community. The physical elements of the proposed project would include the introduction of a new multi-story office structure that would increase the scale and intensity of development on-site as compared to existing conditions. Currently, the project site contains an abandoned 44-unit apartment complex and approximately 1.61 acres of undeveloped land; a

portion of the site was previously developed with a single-family residence, although the residence has since been removed, and an existing single family residence. Although private property, NOP comment letters have suggested that the undeveloped portion of the site currently functions in some limited capacity as open space.

Access through the undeveloped portion of the site is severely limited. The undeveloped portion of the site contains fencing along its southern and western peripheries, which effectively precludes site access from those directions. The northern boundary of the undeveloped portion of the site is directly accessible from San Jose Avenue; notices are posted along San Jose Avenue indicating that the site is private property and trespassing is prohibited. The eastern boundary of the undeveloped parcel is immediately adjacent to the single-family residence that is part of the project site. Although there is no fencing between the two properties, the single family residence is private property and no public access is available from that property. Due to the limited nature of site access, in addition to existing developed nature of the remaining portions of the property this portion of the site is not considered functional open space. The site may provide a visual buffer between residential uses and may in that regard provide some open space benefits, but the site is designated for residential use under the existing zoning designation and is not considered open space.

Development of the proposed project would not create a physical barrier that would result in the loss of neighborhood connectivity and/or otherwise divide the community. The physical division of a community is traditionally associated with the construction of large-scale transportation improvements such as a highway or the creation of a large University Campus. While the proposed project would increase the overall intensity of development on the site as compared to existing, pre-project, conditions, the proposed office structure would not create a barrier that would physically divide the neighborhood by partitioning or separating the neighborhood in a way that would isolate portions of the existing community similar to a highway or large University. As a result, the proposed project would not result in a significant land use effect associated with the physical division of an established community. The project would result in the introduction of higher intensity uses on-site as compared to the existing conditions, but those uses would not physically divide the community in a manner that would represent a significant impact under CEQA.¹ **The project would not physically divide an existing community; this represents a less-than-significant impact.**

Conflict with Any Applicable Land Use Plan, Policy, or Regulation

CEQA requires that an EIR identify and analyze a project's potential to conflict with policies or regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect. CEQA does not require that an EIR determine whether a project is consistent with a municipality's General Plan or other applicable land use plan. The Court's have determined that the issue of General Plan consistency is part of the discretionary authority of the legislative body. In this instance, only the City of Fresno City Council can determine General Plan consistency. CEQA, however, requires that an EIR determine whether a project conflicts with the environmental policies of a General Plan or other applicable regulatory documents. In this case,

¹ Although the potential change in character of the neighborhood does not directly raise an environmental issue that warrants consideration under CEQA, potential environmental impacts associated with the project, including transportation demands, air quality and other issues are analyzed within this Draft EIR. In addition, the City of Fresno, as part of the deliberative process, will consider issues associated with land use compatibility and neighborhood character, among other factors, in determining whether to approve the proposed project. During the course of that process, the public will be encouraged to participate and provide additional public comments regarding the proposed project.

the role of the EIR is to identify mitigation measures to avoid or lessen those potential conflicts to a less-than-significant level. Where mitigation is not feasible or cannot reasonably lessen the extent of a perceived conflict, this may constitute a significant and unavoidable land use effect.

Fresno 2025 General Plan / Bullard Community Plan

The proposed project has the potential to conflict with environmental policies and regulations contained in the City of Fresno 2025 General Plan and Bullard Community Plan that were adopted based in part on environmental considerations. Tables 4.9-3 and 4.9-4 contain a detailed analysis of the project's consistency with applicable policies. Pursuant to CEQA a significant environmental effect must involve an adverse change in existing physical conditions. As proposed, project development would result in physical changes to the environment that may have the potential to conflict with adopted policies intended to avoid and/or mitigate an environmental impact.²

Potential land use conflicts can be classified in several broad land use categories that generally correspond with the topical CEQA sections analyzed in this EIR. Specifically, the project may result in potential impacts in the areas of aesthetics, biological resources, cultural resources, geology, hazards, water quality, noise, public services, traffic, and utilities. In the absence of mitigation or project design features, the project could result in significant and unavoidable land use effects under CEQA and potentially conflict with applicable General Plan policies. While the individual impacts of the proposed development are addressed within each topical CEQA section, the following analysis focuses specifically on the project's conformance with applicable land use policies and regulations intended to avoid or mitigate an adverse environmental impact. A detailed evaluation of each of the applicable General Plan and Bullard Community Plan policies and a determination regarding potential environmental considerations is provided in Tables 4.9-2 and 4.9-3.

As identified in Tables 4.9-2 and 4.9-3, the project would potentially conflict with applicable General Plan and Bullard Community Plan policies that relate to aesthetics, water supply, and infrastructure capacity and availability. These policies are generally intended to ensure that 1) potential environmental impacts to the existing visual character of the area are avoided, 2) adequate public service infrastructure is available to accommodate existing and future demands, and 3) an adequate long-term water supply is available to serve project demands while not compromising the ability of the existing system to meet existing demands. In addition, the proposed project may also conflict with policies intended to minimize construction and operational noise and minimizing air quality effects on sensitive receptors. Specifically, the proposed project has the potential to conflict with the following policies: C-7-a, E-18-a, E-18-b, E-18-c, E-18-d, and Bullard Community Plan Policies 4.4.8-2 and 4.4.8-7. All potential land use inconsistencies can be resolved through the implementation of mitigation contained in this EIR or standard conditions of approval with the exception of policy C-7-a. The City of Fresno Department of Public Utilities Water Division has determined that adequate water supply is available to accommodate project generated demands; no new or expanded sources of supply are necessary (personal communication, Michael Carbajal, September 2011). While the proposed project would potentially conflict with policies related to environmental considerations, these inconsistencies would not result in any new or expanded adverse environmental effects beyond

² While the proposed project may conflict with applicable provisions of the City of Fresno 2025 General Plan and Bullard Community Plan related to environmental considerations, the City of Fresno may, nevertheless, determine that the project is considered consistent with the over-arching goals and objectives of the General Plan; only the City can determine whether a project is consistent with its adopted plans and policies.

those previously identified in this EIR. Moreover, mitigation measures identified in this EIR would ensure that the project is consistent with applicable policies. No additional or land use-specific mitigation measures were identified as necessary to reduce the extent of potential inconsistencies.

An inconsistency or policy conflict may be considered significant under CEQA when substantial evidence in the record supports a fair argument that a project could cause a significant physical effect on the environment due to potential conflicts with adopted land use policies and regulations. According to applicable case law, an inconsistency or conflict is “merely a factor to be considered in determining” the significance of changes in the physical environment caused by a project (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal. App.4th 1170). The project’s potential conflicts/inconsistencies have been assessed within the context of the project’s potential to cause significant physical impacts to the environment. The potential policy inconsistencies or conflicts identified in this EIR would not constitute a significant physical effect on the environment.³ Potential inconsistencies would be considered significant if conflicts would result in a new or significantly increased physical impacts to the environment that were not previously identified in this EIR. The inconsistencies identified in Tables 4.9-2 and 4.9-3 would not result in any direct physical impacts to the environment. See Tables 4.9-3 and 4.9-4 for more information regarding the project’s conflicts with applicable General Plan and Bullard Community Plan policies and regulations.

Impact **The project would potentially conflict with policies contained in the 2025 Fresno General Plan and Bullard Community Plan that are related to environmental considerations. Although the project would potentially conflict with the policies identified below, a conflict, in and of itself, does not constitute an environmental impact under CEQA. The physical impacts of the project are addressed in each of the topical sections of this EIR and mitigation measures have been identified to reduce those impacts wherever possible. Applicable mitigation measures are identified below. This represents a less-than-significant impact.**

Mitigation

Refer to Mitigation Measures 4.1-1 through 4.1-3, 4.4-1, 4.4-2, 4.5-1 through 4.5-4, 4.6-1, 4.6-2, 4.7-1 through 4.7-4, 4.8-1, 4.8-2, 4.10-1, 4.10-3, 4.11-1, 4.13-1 through 4.13-5.

Consistency with City of Fresno Municipal Code

The proposed project consists of rezoning the project site to C-P (Administrative and Professional Office District) in order to accommodate the project as proposed. The project site is currently zoned for residential use and the application to rezone the site would ensure that the project site and adjacent Fig Garden Financial Center are both zoned C-P. According to §12-216 of the Municipal Code, the C-P Administrative and Professional Office District is intended to provide for the development of an integrated professional district wherein all of the related types of uses and facilities may be located.

³Although the proposed project would result in significant physical impacts (e.g., aesthetics, noise, etc) to the environment, the mere fact that the project would result in a significant physical impact does not necessarily constitute a significant land use effect under CEQA. In accordance with industry practice, these impacts are evaluated within of the applicable topical CEQA section, and mitigation measures have been identified to reduce the extent of project impacts.

The proposed office use is considered a permitted use according to §12-216.1(C)(16) of the City of Fresno Municipal Code. The project, due to the structure of the proposed office building, is subject to a Conditional Use Permit pursuant to §12-216.3(B)(5), which allows the construction of a office structure in excess of 35 feet in height. Fresno Municipal Code §12-216.5(D)(1)(a) identifies that a building or structure may exceed 35 feet in height, but not exceeding sixty feet, may be erected subject to securing a Conditional Use Permit pursuant to §12-405 and §12-406. While it is ultimately up to the discretion of the City of Fresno to determine consistency with the Fresno Municipal Code, the proposed project would be required to comply with all applicable development standards contained in §12-216.5 and §12-306. The proposed project will also be required to comply with other elements of the Fresno Municipal Code, including but not limited to §12-306, as well as pay all applicable development fees identified in the City of Fresno Municipal Code.

County of Fresno General Plan

The proposed project is located immediately adjacent to property located within the unincorporated area of Fresno to the south and east. Land uses within these areas are governed by the County of Fresno 2000 General Plan, as amended. These properties are designated for residential uses according to the County's General Plan. The proposed project would result in the introduction of new urban uses (e.g., a commercial office building) in an area that is currently designated for residential uses in the City of Fresno General Plan. As a result, the proposed project and General Plan amendment could result in potential land use concerns and potentially conflict with policies contained in the Fresno County General Plan intended to avoid or mitigate an adverse environmental effect associated with land use compatibility. Potentially land use compatibility issues are addressed in this EIR under specific topics including aesthetics, noise, and transportation. The City of Fresno has reviewed applicable Fresno County General Plan policies and has determined that the proposed project would not result in a substantial policy conflict (personal communication, Mike Sanchez, November 11, 2011). The proposed project site is located entirely within the City of Fresno and is subject to all applicable land use and regulatory requirements pertaining to development within the City's incorporated boundaries. While the site may be adjacent to areas within the County of Fresno, an exhaustive review of the project's consistency with the County's General Plan is beyond the scope of this EIR, and the above information is provided for informational purposes only.

The following table identifies the policies and programs from the *Fresno 2025 General Plan* and *Bullard Community Plan* that are relevant to the project and environmental considerations. This table also provides an analysis of project consistency.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
Aesthetics		
C-7-a.	Provide for safe, clean, and aesthetically pleasing neighborhoods free from excessive traffic and noise.	<p>Potentially inconsistent. Project development would result in increased noise that could adversely impact the surrounding neighborhood; however, the project has been designed to limit site access to avoid traffic impacts on the surrounding residential neighborhood. Measures are identified in this EIR to ensure that project generated noise and traffic impacts will be reduced to a less-than-significant level.</p> <p>Although the project site is surrounded on some sides by multi-story commercial office structures in the adjacent Fig Garden Village shopping center, the proposed four-story office building could result in aesthetic impacts affecting the visual character of the area. This effect would be unavoidable, although mitigation is identified to help minimize the visual impact. The project as proposed may be considered inconsistent with this policy as it relates to aesthetics.</p>
C-20-e.	Development projects shall include aesthetic measures which support functionality and add to the appearance and livability of the community.	Project consistent. The proposed project has some architectural elements to enhance the aesthetic quality of the proposed office structure. Elevations and conceptual streetscapes are provided in Section 4.1 Aesthetics; please refer to that section for more information.
C-20-f.	<p>The project developer shall provide a set of documents and drawings that will allow assessment of the final building product. Materials, texture, and colors shall be noted on the original special permit drawings and on construction plans.</p> <p>Development projects shall appropriate interface with adjacent properties.</p> <p>High-contrast or gaudy building facades, lighting and signage which create disharmony with adjacent properties, or which draw undue attention, should be avoided.</p> <p>Locate service truck access, loading zones, and waste storage/recycling areas at the maximum practical distance from residences and other living quarters.</p> <p>Shopping centers shall have internally unified building design, landscaping, and signage.</p> <p>Building facades shall include design features and</p>	Project consistent. The project applicant will be required to submit final design level drawings to the City of Fresno for review and approval consistent with the requirements of this policy.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	<p>decorative treatments. Visible sides of buildings shall not develop with featureless, “blank” walls.</p> <p>Adequately screen roof-mounted mechanical equipment, and ensure that such equipment adheres to noise standards as set forth in the General Plan Noise Element and City Noise Ordinance.</p> <p>Apply and enforce the city’s Sign and Outdoor Advertising Ordinances. Pursue the amortization and removal of nonconforming and illegal signs and outdoor advertising structures.</p> <p>Landscaping and parking lot shading shall be employed for environmental and aesthetic improvement, while observing safe lines-of-sight along access routes.</p> <p>Exterior lighting shall not create glare for neighboring properties, but shall provide adequate on-site lighting for safety and security purposes.</p>	
C-21-a.	An architectural theme shall be established for each development, including visually enhanced architectural features and building materials (which shall be applied throughout the development, particularly where visible to street frontages and adjacent properties).	Project consistent. The project applicant will be required to comply with this policy as part of the final design of the project. The City of Fresno will be responsible for ensuring compliance with this policy.
C-21-f.	Fences and walls along street frontages shall be designed to be architecturally compatible, aesthetically pleasing, and durable with easy pedestrian access to nearby commercial uses.	Project consistent. All project fencing will be required to comply with this policy. The City of Fresno will be responsible for ensuring that all fences and walls along street frontages will be consistent with this policy.
Transportation/Traffic		
C-20-d.	Development projects shall be designed with appropriate layouts that provide sufficient areas for all proposed activities, for support functions, and for efficient and safe vehicular and pedestrian access.	Project consistent. The project proposes to maintain existing and proposed pedestrian paths connecting the project to adjacent commercial and office centers to promote pedestrian use, convenience, and safety. Proposed vehicular access was evaluated in the Traffic Impact Study, which determined that it was adequately safe and efficient.
E-1-e.	Utilize results of the COFCG transportation modeling process to determine circulation network and capacity deficiencies resulting from land use decision made in the general plan update process, community plan updates, and major plan amendments proposed for development projects.	Project consistent. As described in 4.12 Transportation & Traffic Circulation, the traffic impact study completed for the project was based on methodology consistent with the COFCG modeling process. Measures are identified (payment of fees) to ensure that the City’s circulation system functions at an acceptable level with contribution of project-generated traffic.

**Table 4.9-2
Fresno 2025 General Plan Consistency Analysis**

Policy No.	Policy	Consistency
E-1-f.	Allow a Level of Service “D” (LOS “D”) as the acceptable level of traffic congestion on major streets. LOS “D” according to the Caltrans and COFCG Accepted LOS criteria, as developed by the Florida Department of Transportation, means moderate congestion at peak traffic periods; approaching unstable flow with reduced speeds, limited maneuverability, and loss of convenience; average speeds range from 9 to 17 miles per hour on arterial with stopped delays of 40 seconds or less.	Project consistent. As described in 4.12 Transportation & Traffic Circulation, measures are identified (payment of fees) to ensure that the City’s circulation system functions at an acceptable level of service, based on applicable City and County LOS policies.
E-1-j.	Provide areas for pedestrian and other non-motorized travel that enhance the safety, utilization, and efficiency of the street system. Pedestrian travel should be encouraged as a viable mode of movement throughout the metropolitan area by providing safe and convenient pedestrian facilities in new and existing urban areas and particularly within the Central Area and urban core community centers.	Project consistent. The project proposes to maintain existing and proposed pedestrian paths connecting the project to adjacent commercial and office centers to promote use, convenience, and safety.
E-1-m	Achieve greater pedestrian accessibility to commercial uses from nearby neighborhoods.	Project consistent. The project proposes to maintain existing and proposed pedestrian paths connecting the project to adjacent commercial uses to promote use, convenience, and safety.
E-2-a	Pursue the implementation of Transportation Demand Management and Transportation System Management strategies, as identified by land use and air quality policies and actions of this plan, to reduce peak hour traffic demands and supplement the capacity of the transportation system.	Project consistent. As described in 4.12 Transportation & Traffic Circulation, measures are identified (payment of fees) to ensure that the City’s circulation system functions at an acceptable level with contribution of project-generated traffic; however, no specific TDM measures are included.
E-2-b.	Minimize vehicular and vehicle-pedestrian conflicts on major streets and adjacent land uses through use of traffic design and control measures that reduce congestion and increase safety.	Project consistent. The project proposes to restrict vehicle access to the site to Palm Avenue and the Fig Garden commercial area only. Existing and proposed pedestrian paths will minimize conflicts and increase safety.
E-2-c.	Control access through limitation on the number of intersections, driveways, and median island openings.	Project consistent. The project proposes to restrict vehicle access to the site to Palm Avenue and the Fig Garden commercial area only. Parking on residential streets will also be prohibited.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
E-2-d.	Require design measures to mitigate noise and safety concerns along major streets such as adequate building setbacks, frontage roads, landscaping and noise barriers, particularly for residential and other noise-sensitive uses.	Project consistent. Project will maintain existing and proposed pedestrian paths to promote safety. The project could result in noise impacts from development of additional office uses; however, mitigation is identified in this EIR to ensure that project-generated noise will be reduced to a less-than-significant level.
E-2-f.	Require the completion of a comprehensive traffic impact study for all proposed plan amendments of five acres or more in size or in accordance with traffic impact study guidelines (including minimum project size) as may be established by the City of Fresno.	Project consistent. This EIR includes a comprehensive traffic impact study as summarized in 4.12 Transportation & Traffic Circulation.
E-2-h.	Limit the number of driveway access points on all major streets to minimize traffic disruption and protect traffic flows. No development shall be approved if it will adversely affect the flow of traffic on a public street below an acceptable standard to be determined by the Public Works Director and based upon the policies noted herein.	Project consistent. The project proposes to restrict vehicle access to the site to Palm Avenue and the Fig Garden commercial area only. In addition, mitigation has been identified wherever possible to ensure that the City's circulation system functions at an acceptable level of service.
E-2-i.	Multiple-family residential, commercial, institutional, industrial, and office projects shall be designed such that related traffic will not route through local residential streets.	Project consistent. The project proposes to restrict vehicle access to the site to Palm Avenue and the Fig Garden commercial area only.
Wastewater		
E-18-a.	Pursue construction of new or replacement sewer trunk facilities (such as extension of the Fowler Avenue sewer from South Maple Avenue to the Regional Wastewater Treatment and Reclamation Facility (RWTRF) and capacity enhancement of the Herndon Avenue sewer trunk), or pursue other alternatives consistent with the Wastewater Master Plan (including satellite regional wastewater treatment/reclamation facilities) where necessary to relieve the existing sewer trunks and provide additional capacity to serve planned urban intensification within established areas, planned urban growth areas and existing land uses not presently connected to the public sewer system.	Project consistent with mitigation. The proposed project would result in increased demands for wastewater services and infrastructure beyond existing on-site uses. Comments received by the City of Fresno have indicated that the existing infrastructure that would serve the proposed project would need to be upgraded in order to accommodate project demands. The proposed project, however, includes specific infrastructure improvements to ensure adequate capacity exists to serve the proposed development. Moreover, mitigation identified in Section 4.13 Utilities would also ensure that adequate infrastructure will be provided in connection with project development. The proposed project, as mitigated, is therefore considered consistent with this policy. Please refer to Section 4.13 Utilities.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
E-18-b.	Pursue enlargement or extension of the sewage collection system where necessary to serve planned urban development including the designated North and Southeast Growth Areas, with the capital costs and benefits allocated equitably and fairly between the existing users and new users while facilitating economic diversification. New users shall, to the extent not inconsistent with economic diversification strategies, pay for the cost of being attached to the collection system through connection fees, including the cost of any incremental burden that they may place on the entire system; and pay for their share of operational and maintenance costs in addition to any costs for extraordinary facilities such as lift stations or capacity enhancement measures.	Project consistent with mitigation. Please see response above for more information.
E-18-c.	Continue development and utilization of city-wide sewer flow monitoring and computerized flow modeling to determine availability of sewer collection system capacity to serve planned urban development. This information shall be considered in evaluating general plan amendment applications.	Project consistent with mitigation. Please see response above for more information.
E-18-d.	Determine that adequate trunk sewer capacity exists or can be provided to serve proposed development prior to approval of rezoning, special permits, tract maps, and parcel maps so that the capacity of existing facilities are not exceeded.	Project consistent with mitigation. Please see response above for more information regarding infrastructure capacity. The analysis contained in this EIR is consistent with the requirements of this policy. The proposed project would not exceed the capacity of existing facilities. Therefore, the project, as mitigated, is consistent with this policy.
E-20-a.	Provide increased wastewater treatment plant capacity in a timely manner to facilitate planned urban development within the facility's planned service area, and accommodate experienced increase in flows and loadings from existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users while facilitating economic diversification. New users shall, to the extent not inconsistent with economic diversification strategies, pay for the cost of being attached to the treatment facility through connections fees, including the cost of any	Project consistent. Adequate treatment capacity is currently available to serve the proposed project. The project will be required to pay all applicable connection fees as a condition of project approval. Please refer to Section 4.13 Utilities for more information.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	incremental burden that they may place on the entire system; and, pay for the full operation costs of extraordinary facilities such as satellite or “package” treatment plants.	
E-20-d.	Monitor wastewater treatment plant flows and loadings to the extent feasible and consider the wastewater treatment impacts of land use changes when evaluating general plan amendment proposals.	Project consistent. Project related wastewater treatment impacts are considered in this EIR. The project, as a condition of approval, will be required to pay all applicable connection fees and developer impact fees to share the cost of any future capacity upgrades. The project itself would not require additional treatment capacity.
E-21-a.	Implement conservation and other programs and policies to reduce wastewater flows.	Project consistent. The analysis in this EIR evaluated potential wastewater impacts associated with the project. The proposed project will be required to comply with all applicable City policies and programs related to the reduction of wastewater flows.
Water		
E-22-a.	The Departments of Public Utilities and Public Works will develop and use available and innovative tools as necessary to forecast demand on water production and distribution systems by urban development, and to determine appropriate facility needs.	Project consistent. The EIR consultant and the Department of Public Utilities worked together directly to estimate projected water demands associated with the proposed project. This EIR independently analyzed the project’s water demand based on the methodology contained in the UWMP. In addition, the City also independently reviewed applicant generated water demand information and determined that those estimates are reasonable for the type of use proposed. The analysis contained in this EIR determined that the proposed office development would significantly reduce the extent of on-site water use as compared to the demand projections contained in the UWMP under the site’s existing land use designations. In addition, project design features proposed by the applicant were also evaluated; these measures would reduce water demand associated with the project by offsetting a portion of demand by implementing conservation measures at the Fig Garden Financial Center. These measures will be incorporated as conditions of approval. The analysis in the EIR is consistent with the requirements of this policy.
E-22-b	Set adequate and appropriate conditions of approval for each new development proposal to ensure that the necessary potable water production and supply facilities are in place prior to occupancy.	Project consistent. The EIR consultant and Department of Public Utilities reviewed a number of project-design features proposed by the applicant. These measures will be incorporated as conditions of approval in order to further minimize water demand associated with the project. Please refer to Section 4.13 Utilities for more information.
E-22-c.	The Department of Public Utilities will recommend capital improvement plans and fee schedules to meet the demands of planned development (including both intensification of established areas and new development within designated growth areas) and continue to provide adequate water quantity and quality to serve the established urban community.	Project consistent. The City of Fresno Department of Public Utilities were consulted during the course of preparing this EIR and identified specific improvements to ensure project infrastructure will be sufficient to meet anticipated demands. The proposed project will be subject to all applicable development impact fees and will be required to provide sufficiently sized infrastructure to meet project demands. Please refer to Section 4.13 Utilities for more information.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
E-22-e.	Capital improvement costs and benefits of new or upgraded water production and distribution facilities shall be allocated equitably and fairly between existing users and new users, consistent with economic diversification strategies.	Project consistent. The proposed project will be required to pay the cost of upgrading existing and providing new infrastructure to serve the proposed project. All project infrastructure will be subject to the review and approval of the City of Fresno. Please see Section 4.13 Utilities for more information.
E-22-f.	New development and connections to the city's water supply and distribution system shall pay for the cost of being attached to the water system through connection fees and for the cost that they place on the entire water system including treatment, production, distribution, recharge and conservation and/or provide for the installation of public facilities and participate in capital improvement financing programs necessary to accommodate new development, consistent with economic diversification strategies.	Project consistent. The proposed project, as a condition of approval, will be subject to all applicable connection and impact fees as required pursuant to the City's Municipal Code.
E-22-g.	Continue to implement water system policies that require the provision of a potable water supply that complies with the standards of the Federal and State Safe Drinking Water Acts for consumptive use, and meets applicable standards of volume and pressure for fire suppression.	Project consistent. All potable water will be required to comply with applicable State and federal drinking water requirements. Mitigation has been identified to ensure that adequate fire suppression will be available. Please see Section 4.13 Utilities for more information.
E-22-i.	Mitigate the effects of development and capital improvement projects on the long-range water budget to ensure an adequate water supply for current and future uses.	Project consistent. The proposed project would result in significantly less water use than projected in the 2008 UWMP for the site's existing land use designations. In addition, the proposed project would also generate less water demand than compared to historical water use on-site. The proposed project would not generate a significant demand for water such that inadequate supplies would be available for current and future use. Moreover, mitigation has been identified in this EIR to ensure that water use is further reduced. The project is therefore considered consistent with this policy. Please see Section 4.13 Utilities for more information.
E-22-l.	Evaluate new development proposals and entitlement activities in light of the conclusions and recommendations of the Fresno Metropolitan Water Resource Management Plan.	Project consistent. See response above.
G-4-e.	The Departments of Public Utilities and Public Works will use available and innovative forecasting methods to determine the demand on water resources posed by urban development, and to determine appropriate facility needs for meeting this demand.	Project consistent. The analysis in the EIR evaluated projected water demand associated with the proposed project consistent with the methodology utilized in the Urban Water Management Plan. When necessary, mitigation measures were identified to ensure that adequate infrastructure is available to serve the project. Please see Section 4.13 Utilities for more information.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
G-4-f.	Adequate and appropriate conditions of approval will be set for each development project proposal to ensure long-term maintenance of adequate clean water resources and to ensure that necessary potable water production and supply facilities are in place to serve the project prior to occupancy.	Project consistent. The EIR consultant and Department of Public Utilities have identified a number of specific mitigation measures to ensure that adequate supply facilities are available to serve the project. Please refer to Section 4.13 Utilities for more information.
G-4-g.	<p>Maintain a comprehensive conservation program that reduces per capita water usage in the city's water service area.</p> <ul style="list-style-type: none"> ▪ Encourage and support programs that result in decreased water demand such as landscaping standards that require drought-tolerant plants and controls on watering systems. ▪ Implement "best management practices" as necessary to maintain the city's surface water entitlements. ▪ Adopt and implement policies for development of artificial lakes. ▪ Work cooperatively toward effective uniform water conservation measures that would apply throughout the planning area. ▪ Expand efforts to educate the public about water supply issues and water conservation techniques. 	Project consistent. The proposed project will be required to comply with all applicable water conservation programs developed by the City of Fresno. In addition, standard conditions of approval, as well as project design measures, will ensure that the proposed project implements water conserving measures consistent with this policy. Please refer to Section 4.13 Utilities for more information.
Public Services		
E-24-c.	Continue to identify and apply appropriate safety design and operational measures as conditions of development entitlement approval including but not limited to access control measures, lighting and visibility of access points and common areas, functional and secure on-site recreational and open space improvements within residential developments, and utilization of private "certified" security services.	Project consistent. The City of Fresno will apply appropriate safety design and operational measures as conditions of approval for the proposed project.
E-26-b.	Provide for an average response time of not more than five minutes for all emergency requests for service within the metropolitan area.	Project consistent. The proposed project would not adversely impact existing emergency response for fire protection services. The City of Fresno Fire Department was consulted during the preparation of this EIR and they determined that adequate facilities were available to accommodate project demand. Please refer to Section 4.11 Public Services for more information regarding fire protection services.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
I-1-a.	<p>Adopt appropriate standards, as necessary, for fire protection and fire suppression within high-rise buildings.</p> <ul style="list-style-type: none"> • The City of Fresno shall enforce the latest adopted version of the California Code of Regulations Title 24 standards regarding high-rise buildings, to ensure the highest level of fire protection for new and existing construction. • The City of Fresno shall pursue to the fullest extent possible the existing city ordinance and Uniform Fire Code (UFC) and National Fire Protection Association (NFPA) standards for the installation of automatic fire sprinkler systems for all new construction and for existing construction where trade-offs are allowed by local ordinance. • Maintain and enforce the provisions of Fresno Municipal Code that relate to fire protection requirements (public service delivery plan and fire access lanes/areas) for mid-rise and high-rise buildings. • The City of Fresno shall maintain adequate personnel and equipment, based at appropriate locations, to expeditiously meet the fire prevention, life safety, and emergency mitigation needs for large and tall structures. 	<p>Project consistent. The final design of the proposed project will be required to comply with all applicable City of Fresno fire protection and fire suppression standards, including Title 24, Uniform Fire Code, and National Fire Protection Association standards. In addition, the proposed project will be required to comply with all of the applicable provisions of the Fresno Municipal Code related to fire protection requirements. Moreover, adequate fire protection personnel would be available to meet fire protection needs generated by the proposed project.</p>
Recreation		
F-2-b.	<p>The city will ensure that the Parks and Development and Resource Management Departments coordinate their review and approval of all development entitlements (i.e., site plans, conditional use permits, and subdivisions) in order to implement open space standards.</p> <p>The city will continue to require the provision of adequate recreational open space and facilities (e.g., easements or rights-of-way) as appropriate through mandatory dedication of land, requirements for improvements to land, and/or development fees, as a condition of approval or issuance of building permits</p>	<p>Project consistent. The proposed project, as required pursuant to the City's Municipal Code, will be required to submit payment of all applicable park facility impact fees to mitigate for potential project-related impacts. The proposed project is not anticipated to generate significant demands for open space or recreational amenities. Please see the response above for more information. Please also refer to Section 4.11 Public Services.</p>

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	<p>for subdivisions and entitlements.</p> <p>When a site designated for a park is part of a subdivision map, the city may require the subdivider to provide for the park in the project’s development plans (consistent with state law and city policies, standards, and specification for that type of park).</p> <p>Where feasible and warranted, open space easements may be used to secure appropriate public use of sensitive areas with scenic or recreation values, and buffering space for sensitive areas.</p> <p>Wherever feasible, the city will encourage appropriate open space areas in private projects, in the form of trails, enhanced landscaped setbacks, parks, and water features (when the latter are developed as combined recharge and/or storm water runoff facilities).</p> <p>Where feasible and warranted, the City of Fresno will encourage the renewal of existing public and private spaces (such as rehabilitated landfills, parking lots, obsolete industrial buildings, surplus schools, etc.) for parks and recreation purposes, and will evaluate other underutilized parcels (such as abandoned railroad rights-of-way) for potential mini-park sites or landscaped public areas.</p> <p>Explore fee reductions/waivers and other permit processing incentives for development projects that allocate one percent or more of their project cost for recreational amenities on-site or in the vicinity of the project.</p> <p>Explore a bonus development entitlement program in which development incentives (i.e., bonus densities, bonus floor area square footage) would be provided for contributions to public recreational facilities on-site or in the vicinity of the development project.</p>	

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
Air Quality/Greenhouse Gas		
G-1-d.	Continue to implement broad scale general plan strategies to decrease the generation of air pollution through the reduction of vehicle miles traveled, excessive vehicle traffic congestion and excessive engine idling by implementation of public transportation and other alternatives to private automobile travel.	Project consistent. The air quality analysis performed for this EIR determined that operation of the project would not result in significant air quality impacts associated with vehicle emissions. The project is consistent with this policy.
G-1A-c(3)	Utilize appropriate computer models (software recommended by San Joaquin Valley Air Pollution Control District or other air quality agencies) to evaluate air quality impacts of projects that require environmental review by the City of Fresno.	Project consistent. An air quality/greenhouse gas evaluation was completed for the proposed project in consultation and accordance with the San Joaquin Valley Air Pollution Control District (SJVAPCD).
G-1A-c(4)	Information regarding land use plans, development projects, and amendments to development regulations will continue to be routed to the San Joaquin Valley Air Pollution Control District for that agency's review and comment on potential air quality impacts.	Project consistent. See above.
G-1A-f	Maintain the city's construction standards that require cleaner burning prohibit coal-fired heaters and installation of new wood-burning heaters and fireplaces.	Project consistent. The proposed project will be required to comply with the provisions of this policy.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
G-1B-a(1)	Establish and uphold planning criteria and environmental analysis protocols that evaluate potential greenhouse gas (GHG) emissions from public and private projects and provide useful reduction and mitigation strategies through implementation measures including the following: (1) When reviewing private and public projects, City departments shall incorporate global climate change analysis and mitigation measures as prescribed by the updated Public Resources Code Sections and CEQA Guidelines promulgated under provisions of Senate Bill 97 (2007), and shall utilize thresholds of significance or applicable alternative analysis strategies (such as qualitative application of performance standards), adopted by the San Joaquin Valley Unified Air Pollution Control District, the California Office of Planning and Research, and the California Environmental Protection Agency.	Project consistent. An air quality/greenhouse gas evaluation was completed for the proposed project in consultation and accordance with the San Joaquin Valley Air Pollution Control District (SJVAPCD). The project will incorporate green building techniques where possible to minimize greenhouse gas emissions.
G-1B-a(2)	(2) After GHG inventorying, benchmarking, and goal setting are established for the City according to Policy No. G-1B-a(2) above, the City shall consider adoption of measures that would require appropriate energy and water conservation standards; would further facilitate mixed use projects; would increase incentives for infill development; and would increase the incorporation of mass transit, bicycle and pedestrian amenities into public and private projects.	Project consistent. See above.
Energy		
G-9-c.	Through its regulation of land use planning and development, the city will provide for energy conservation. <ul style="list-style-type: none"> · Current energy-efficient planning and construction guidelines will be maintained. · Environmental review of development projects (including changes in land use designations) will include a description of energy consumption and conservation features that are, or feasibly could be, incorporated into these projects. 	Project consistent. The proposed project will be required to comply with the provisions of this measure. The analysis in this EIR identifies projected energy demands and appropriate measures to reduce energy conservation.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	<ul style="list-style-type: none"> · Siting, building orientation, structural design, and landscaping of a proposed land use or development project will be considered in relation to energy efficiency. Energy efficiency will be a factor that is considered in the decision process for projects. · In regard to the Solar Rights and Solar Shade Acts of 1978, the city shall observe provisions in state law regarding solar access and shall continue to study whether further legislation is necessary. · At the interface of commercial or industrial and residential land uses, or the interface of multi-family with single-family residential land uses, height restrictions and/or setbacks should be used at the common boundary to ensure solar access to structures on both sides of the boundary. · Updated information on California Title 24 and other energy conservation guidelines and measures will be made available to staff and the area construction industry. 	
Historic Resources		
G-11-e.	<p>If the site of a proposed development or public works project is found to contain unique prehistoric (archaeological or paleontological) resources, and it can be demonstrated that the project will cause damage to these resources, reasonable efforts shall be made to permit any or all of the resource to be scientifically removed, or it shall be preserved <u>in situ</u> (left in an undisturbed state). <u>In situ</u> preservation may include the following options, or equivalent measures:</p> <ul style="list-style-type: none"> · amending construction plans to avoid prehistoric resources. · setting aside sites containing these resources by deeding them into permanent conservation easements. · capping or covering these resources with a protective layer of soil before building on the sites. · incorporating parks, green space, or other open space in the project to leave prehistoric sites undisturbed and 	<p>Project consistent. The project site does not contain any known prehistoric or historic resources. Mitigation has been incorporated into this EIR to ensure that potential impacts to potential buried archaeological resources are reduced to a less-than-significant level. The project is consistent with this policy.</p>

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	<p>to provide a protective cover over them.</p> <ul style="list-style-type: none"> · in order to protect prehistoric resources from vandalism or theft, their location shall not be publicly disclosed until or unless the site is adequately protected. 	
Biological Resources		
G-12-d.	<p>Projects that could adversely affect rare, threatened, or endangered wildlife and vegetative species (or may have impacts on wildlife, fish, and vegetation restoration programs) may be approved only when findings are made by the California Department of Fish and Game (and the U.S. Fish and Wildlife Service, as appropriate) that adequate mitigation measures are incorporated in the project's design.</p>	<p>Project consistent. As described in 4.4 Biological Resources, the project could impact special status species, if present. Mitigation is identified in this EIR to reduce potential impacts on special status species to a less-than-significant level. The project is consistent with this policy.</p>
Noise		
H-1-b.	<p>For purposes of city analyses of noise impacts, and for determining appropriate noise mitigation, a significant increase in ambient noise levels is assumed if the project causes ambient noise levels to exceed the following:</p> <ul style="list-style-type: none"> · the ambient noise level is less than 60 dB Ldn and the project increases noise levels by 5 dB or more. · the ambient noise level is 60-65 dB Ldn and the project increases noise levels by 3 dB or more. · the ambient noise level is greater than 65 dB Ldn and the project increases noise levels by 1.5 dB or more. 	<p>Project consistent. The noise analysis performed for this EIR applied these standards as thresholds of significance under CEQA. As described in 4.10 Noise, all noise impacts associated with the project can be reduced to a less-than-significant level with mitigation identified in this EIR.</p>
H-1-c.	<p>The city shall review new public and private development proposals to determine conformance with the policies of this Noise Element.</p>	<p>Project consistent. The analysis contained in this EIR evaluated potential noise related impacts associated with the proposed project. Mitigation measures were identified to ensure that all impacts were reduced to a less-than-significant level.</p>
H-1-d.	<p>The city shall require an acoustical analysis in those cases where a project potentially threatens to expose existing or proposed noise-sensitive land uses to excessive noise levels. The presumption of potentially excessive noise levels shall be based on the location of new noise-sensitive uses to known noise sources or staff's professional judgment that a potential for adverse noise impacts exists. Acoustical analyses shall be required early in the review process so that noise mitigation may</p>	<p>Project consistent. An acoustical analysis was prepared for the proposed project and mitigation measures were incorporated to ensure that all noise related impacts are reduced to a less-than-significant level.</p>

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
	be included in the project design. For development not subject to environmental review, the requirements for an acoustical analysis shall be implemented prior to the issuance of building permits. The requirements for the content of an acoustical analysis are established by the Development and Resource Management Department in conjunction with environmental health agencies.	
H-1-e.	The city shall develop and employ procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the development review and building permit processes.	Project consistent. A Mitigation Monitoring and Reporting Program will be developed as part of the Final EIR that identifies monitoring requirements for all mitigation, including noise. The City of Fresno will be responsible for ensuring compliance with the mitigation measures.
H-1-f.	The city shall develop and employ procedures to monitor compliance with the policies of the Noise Element after completion of projects where noise mitigation measures have been required.	Project consistent. A Mitigation Monitoring and Reporting Program will be developed as part of the Final EIR that identifies monitoring requirements for all mitigation, including noise. The City of Fresno will be responsible for ensuring compliance with the mitigation measures to assure consistency with the policies of the Noise Element.
H-1-l.	Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table 9 at noise-sensitive land uses.	Project consistent. Noise related impacts associated with the parking ventilation systems would result in increased noise related impacts. Mitigation has been identified in this EIR to ensure that all project impacts related to noise would be reduced to a less-than-significant level.
Geology/Seismic Hazards		
I-3-a.	The City of Fresno shall enforce the latest adopted Uniform Building Code and the Dangerous Building Ordinance (Article 12 of Fresno Municipal Code, Chapter 12) to ensure seismic protection for new and existing construction.	Project consistent. The proposed project will be required to comply with the latest version of the Uniform Building Code and the Dangerous Building Ordinance consistent with the requirements of this policy. Please refer to Section 4.6 Geotechnical and Geological Hazards for more information.
I-3-c.	In areas having potential geologic and/or soils hazards, development shall not have on-site drainage or disposal for wastewater, stormwater runoff, swimming pool/spa water, unless a soil analysis by a registered civil engineer (or engineering geologist specializing in soil geology) concludes that on-site drainage/disposal will not induce, worsen or spread geologic hazards.	Project consistent. The proposed project is not located on an area subject to geologic and/or soil hazards. Please refer to Section 4.6 Geotechnical and Geological Hazards for more information.

Table 4.9-2 Fresno 2025 General Plan Consistency Analysis		
Policy No.	Policy	Consistency
I-3-d.	Development shall be prohibited in areas where analysis by a registered civil engineer or registered geologist determines that no corrective measures could feasibly mitigate potential geologic hazards.	Project consistent. The proposed project site does not contain any geologic hazards that cannot be feasibly mitigated. Please refer to Section 4.6 Geotechnical and Geological Hazards for more information.
Hazards		
I-6-d.	As may be appropriate, the city shall require and evaluate the results of "Level I" / "Phase I" and further site investigations before approving development upon, or annexation of, property.	Project consistent. An Updated Initial Environmental Assessment was prepared for the subject property by Moore Twinning Associates, Inc. (2011). The results of that analysis determined that there were no significant hazards located on-site that would preclude future development. Please refer to Section 4.7 Hazards and Hazardous Materials for more information.
I-6-e.	Through the environmental review process for land use plans and other development projects, the city will continue to identify and assess the health- and safety-related implications of storage, use, and disposal of hazardous materials.	Project consistent. The proposed project does not entail to use and/or storage of significant quantities of hazardous materials. Demolition of existing on-site structure could, however, result in the exposure of construction personnel to existing hazards, including asbestos or lead-based paint. Mitigation has been incorporated into this EIR to ensure that appropriate measures are taken to avoid impacts associated with these hazards. All potentially hazardous materials have been disclosed in the context of this EIR; please refer to Section 4.7 Hazards and Hazardous Materials for more information.
I-6-i.	The city will utilize conditions for development projects, will adopt and enforce ordinances, and will use its police powers for land use regulation, code enforcement and nuisance abatement in order to prohibit the inappropriate use of, and/or discharge of, toxic and hazardous materials to the atmosphere, to wastewater collection and storm drainage systems, to groundwater, and to surface bodies of water, when such use or discharge threatens public health, safety, or general welfare.	Project consistent. The proposed project will not result in the use and/or storage of hazardous materials. All hazardous materials that may be removed in connection with site preparation work (i.e. demolition of existing structures) will be disposed of in accordance with all applicable requirements. Please see Section 4.7 Hazards and Hazardous Materials.

Table 4.9-3 Bullard Community Plan Consistency Analysis		
Policy No.	Policy	Consistency
Commercial Land Use		
4.2.4-4	Commercial areas shall be designed such that commercial traffic will not route through local residential streets.	Project consistent. Project traffic will not be routed through local residential streets; please refer to Section 4.13 for more information.
4.2.4-5	There shall be no drainage of stormwater from commercial uses to the San Joaquin River, without treatment of the runoff in settling basins prior to discharge	Project consistent. All stormwater will be detained on-site.
4.2.4-7	<p>The following development standards for interface areas between properties zoned or planned for commercial or office uses, and properties zoned or planned for residential uses, shall be mandatory for land north of Herndon Avenue (excepting the Herndon townsite and the Pinedale Redevelopment Area) and advisory for all other areas.</p> <ol style="list-style-type: none"> a. All loading and storage areas shall be screened from view of adjoining property zoned or planned for residential uses, by a combination of landscape planting and a solid masonry wall. Loading space shall be located not less than one hundred fifty feet from the boundary of said residential property; however, the proximity of loading areas may be reduced to not less than forty feet from the boundary of residential property, if the director of the Development Department or the Planning Commission finds that additional screening and noise attenuating methods have been designed to adequately protect adjoining residential property. All storage shall be within an enclosed structure. Outdoor storage is expressly prohibited; b. Roof-mounted and detached mechanical equipment for commercial and office uses shall be screened from view and acoustically baffled, to prevent the noise level rating for the equipment from exceeding 55 Ldn, measured at the nearest property line; c. A landscaped setback twenty feet wide, containing deciduous and evergreen trees, shall be planted and maintained along the property line between 	Project consistent. The proposed project will be required to comply with the requirements of this policy to the extent they apply to the project. Adequate screening will be provided in connection with the project in order to minimize the extent of project visibility from adjacent residential uses.

**Table 4.9-3
Bullard Community Plan Consistency Analysis**

Policy No.	Policy	Consistency
	<p>commercial and office uses and abutting properties zoned or planned for residential uses, and along abutting local streets, provided, however, that this requirement shall not apply to those parcels of land which are one acre or less in size, or to parcels larger than one acre, subject to Director review and approval of landscape plans;</p> <p>d. No commercial or office building shall be constructed within fifty feet of the property line of abutting properties zoned or planned for residential uses;</p> <p>e. The following wall and berm treatment shall be required for commercial uses and office uses:</p> <ol style="list-style-type: none"> 1) A solid masonry wall size feet in height, an earth berm six feet in height, or any combination of solid masonry wall and earth berm that provides a continuous barrier six feet in height, shall be erected on, or along, the property line between properties zoned or planned for commercial and office uses and properties zoned or planned for residential uses; 2) A solid masonry wall three and one-half feet in height, an earth berm three and one-half feet in height, or any combination of solid masonry wall and earth berm that provides a continuous barrier three and one half feet in height, shall be erected on, or along, the setback line twenty feet from the parallel with the right-of-way line of abutting local streets; 3) Earth berms shall be planted with grass or ground cover, and maintained by the property owner; <p>f. The provisions of the approved commercial district or office district shall apply to outdoor advertising for commercial and office uses, excepting freestanding signs in commercial district, wherein there shall be</p>	

Table 4.9-3 Bullard Community Plan Consistency Analysis		
Policy No.	Policy	Consistency
	<p>permitted one freestanding sign containing the name of buildings and occupants or groups thereof, and shall be not more than one hundred and twenty-five square feet in area, and not more than twenty feet in height, and shall not be located within any required landscaped setback or landscaped transition setback area;</p> <p>g. Within an area on hundred feet wide abutting property zoned or planned for residential use, exterior area lighting for parking areas, carports, garages, access drives and loading areas for commercial uses and office uses shall be shielded, to prevent line of sight visibility of the light source from abutting property zoned or planned for residential use.</p>	
Public Facilities		
4.4.8-2	Maintain the City's excellence in fire protection services through the provision of new fire stations and first class water supply systems in the developing portions of the Bullard Community, to be funded primarily by the UGM process.	Project consistent with mitigation. The project site currently has inadequate fire flow to serve the proposed project. The City of Fresno has identified potential concerns related to existing fire flow volumes. Specific infrastructure improvements have been identified to ensure that project generated demands can be accommodated. Therefore, adequate fire protection services will be available to meet anticipated project demands. Please refer to Section 4.11 Public Services and Section 4.13 Utilities. Implementation of mitigation measures identified in this EIR, in addition to the payment of all applicable impact fees consistent with the City's current citywide impact fee program will ensure that the project will be consistent with the intent of this policy.
4.4.8-4	Provide for storm water drainage facilities of sufficient capacity to accommodate the anticipated runoff from planned land uses, through coordination with the Fresno Metropolitan Flood Control District. For those drainage designed, new development that would in itself result in a condition wherein the capacity of the existing facilities would be exceeded, or would contribute to a projected overloading of the existing or substantially designed facilities at buildout of the drainage zone, shall not be approved unless conditioned upon adequate relief measures, as determined by the Fresno Metropolitan Flood Control District.	Project consistent. As described in 4.8 Hydrology and Water Quality, the proposed storm water drainage facilities will be of sufficient capacity to accommodate the anticipated runoff from planned land uses in compliance with the Fresno Metropolitan Flood Control District.

**Table 4.9-3
Bullard Community Plan Consistency Analysis**

Policy No.	Policy	Consistency
4.4.8-6	Promote and support existing water conservation and water recharge efforts and explore the feasibility of using more of the City's surface water entitlement to San Joaquin River Water for water recharge purposes.	Project consistent. The proposed project would result in significantly less water use than projected in the 2008 UWMP for the site's existing land use designations. In addition, the proposed project would also generate less water demand than compared to historical water use on-site. The proposed project would not generate a significant demand for water such that inadequate supplies would be available for current and future use. Moreover, mitigation has been identified in this EIR to ensure that water use is further reduced. The project is therefore considered consistent with this policy. Please see Section 4.13 Utilities for more information.
4.4.8-7	Sewer: At the current rate of development and assuming development occurs in accordance with planned land uses, the capacity of the Cornelia Sewer Trunk line will be reached in about 8 years. Property west of Polk Avenue and west of Blythe Avenue north of a line parallel to and one-quarter mile north of Herndon Avenue, is within the service area of the future Grantland Trunk line. Therefore, continued growth in the Bullard Community beyond about 1996 will be dependent upon the construction of the Grantland Trunk line, which will provide sewer service west of Polk Avenue and will provide relief to the Cornelia Trunk line by taking the Herndon Trunk line flows from the Cornelia Trunk Service Area. Consequently, all new development in the Cornelia and Grantland Service areas shall be subject to fees to help finance the construction of the new Grantland Trunk line as determined by the Council. For those areas served within existing branch sewer lines, new development that would in itself result in the capacity of the line being exceeded or would contribute to the projected overloading of the existing line at buildout of the service area, shall not be approved unless conditioned upon adequate relief measures as determined by the Council.	Project consistent with mitigation. The proposed project would increase demand for sanitary sewer capacity and could exceed the limitations of existing infrastructure currently serving the project site. In order to address existing system deficiencies, the project has been designed to include infrastructure improvements to ensure that adequate capacity exists to accommodate project generated demands. In order to ensure that adequate infrastructure will be provided, the EIR has identified mitigation in Section 4.13 Utilities. Incorporation of mitigation would ensure consistency with this policy. Moreover, the payment of the City's adopted Trunk Sewer Fee would ensure that all applicable development impact fees are paid and potential impacts are mitigated.
Circulation		
4.5.9-2	The number of driveway access points on major streets should be minimized to protect traffic flow.	Project consistent. The project proposes to restrict vehicle access to the site to Palm Avenue and the Fig Garden commercial area only.
4.5.9-7	Local residential streets shall be designed to discourage through and/or non-residential traffic.	See above.

Table 4.9-3 Bullard Community Plan Consistency Analysis		
Policy No.	Policy	Consistency
Parks & Recreation		
4.6.3-4	Neighborhood parks shall be established at the locations designated on the community plan map and shall be funded by U.G.M. fees.	Project consistent. The proposed project will be subject to all applicable fees, including fees to fund the construction of park and recreational facilities. Please refer to Section 4.11 Public Services for more information.

The project is not anticipated to conflict with any applicable provisions of the City of Fresno Municipal Code that were adopted for the express purpose of avoiding and/or mitigating an adverse environmental effect; this is considered a less-than-significant impact for the purposes of this EIR. Moreover, the City of Fresno will be responsible for independently analyzing the proposed project with current General Plan and Bullard Community Plan policies, as well as the City's Municipal Code to ensure consistency with applicable City requirements. This information will be contained in the staff report prepared for the project.

Air Quality Management Plan

A detailed discussion of the project's consistency with the San Joaquin Valley Air Quality Management Plan, in addition to other relevant federal, state and regional air quality and climate change regulations (i.e. SB 375, AB 32, etc.), is contained in Section 4.3 Air Quality. Please refer to that section for more information.

Land Use Compatibility

Given the extensive public comments received during the NOP process raising concerns associated with land use compatibility, the following analysis has been included in this EIR for informational purposes. CEQA does not require such an analysis in an EIR, but a Lead Agency may elect to include such an analysis. In most cases, the issue of land use compatibility is typically addressed in the staff report and during the deliberative process. Land use compatibility issues primarily arise from three causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project; and 3) the new development may not be appropriate in the existing neighborhood. For the purposes of this analysis, a land use compatibility conflict is considered significant when such conflicts would result in additional physical impacts to the environment beyond those identified within this EIR.

Potential land use compatibility impacts associated with the proposed project can generally be classified within the first category described above; the proposed project would result in environmental impacts, including traffic, noise, and aesthetics, among others, which have the potential to adversely affect surrounding residential uses. The physical impacts associated with the proposed project may constitute a nuisance to adjacent lower density residential uses; office uses could, therefore, be considered incompatible with lower density residential development. The analysis contained in this EIR determined that adverse noise-related effects associated with the proposed project could be mitigated to a less-than-significant level such that surrounding uses would not be negatively affected. Project impacts related to aesthetics and visual resources cannot, however, be reduced to a less-than-significant level. These impacts would adversely impact residential surrounding uses and constitute a potential land use compatibility issue, although extensive landscaping and screening would minimize the extent of potential aesthetic-related concerns. In addition, the proposed project includes measures to retain similar landscape treatments as the adjacent Financial Center in order to ensure the project is compatible with the surrounding area. The land use compatibility issue would not, however, result in any new or expanded environmental impacts that have not already been disclosed in this EIR. The environmental impacts associated with aesthetics have been disclosed within the appropriate section of this EIR. While this would not constitute a new environmental impact under CEQA, these effects may nevertheless be considered incompatible with the surrounding residential area.

Land use compatibility issues may also arise in conjunction with development that is proposed in an inappropriate location, given the scale, intensity, or nature of the project. The majority of

public concerns identified during the NOP comment period generally fall within this category. Specifically, comment letters identified that the height and scope of the project may be inappropriate for a predominately low-density residential area, particularly in regard to potential traffic, noise, and other aesthetic considerations. Although the proposed project would result in the construction of a new office structure on a site previously designated for residential land uses, the project represents a logical extension of office oriented uses as part of the adjacent Fig Garden Financial Center. The project, as designed, consists of extensive exterior landscaping and screening consistent with the existing landscaping as part of the Financial Center in order to maintain compatibility with the existing neighborhood. In addition, measures have also been implemented to insure that traffic and noise related impacts are minimized to avoid potential incompatibility issues. Ultimately, it is up to the City of Fresno, through the deliberative process, to determine whether the proposed project represents an appropriate use of the project site. An important part of those considerations will be whether the density and scale of the project is considered compatible with other surrounding land uses.

The potential environmental impacts associated with the scale, intensity and nature of the project are reflected in the analysis in this EIR in each of the topical CEQA sections. An EIR must represent an objective analysis of the environmental impacts associated with the project; it is not appropriate for an EIR to determine the appropriateness of a project in terms of its scale, siting, and intensity or whether the project is considered compatible with other uses. An EIR is intended to disclose the environmental impacts associated with a discretionary action and identify appropriate mitigation to reduce the extent of those impacts to the maximum extent possible. With this in mind, this EIR contains an analysis of a number of project alternatives that seek to minimize the extent of adverse environmental impacts associated with developing the project site. These project alternatives may also reduce potential land use compatibility issues identified by concerned citizens. Please refer to Section 6.0 for an analysis of selected project alternatives.

Land use compatibility issues are important factors that will be considered by the decision-making body as part of the deliberative process. To the extent that the project would result in potential adverse environmental effects, the effects of which may be considered incompatible with adjacent uses, the EIR has identified mitigation to reduce those impacts to the greatest extent possible. These effects may, nevertheless, still be perceived by adjacent uses as incompatible. Ultimately, the City of Fresno will need to carefully evaluate potential land use compatibility matters associated with the proposed project within the context of other land use and planning considerations, including measures to 1) reduce greenhouse gas emissions and per capita vehicle miles traveled (see SB 375); 2) promote infill development; and 3) improve land use efficiency by providing an appropriate balance of uses.

While the City of Fresno will need to balance competing land use objectives, including issues related to land use compatibility, reduction in GHG emissions, providing an appropriate mix of uses, and other factors, the potential land use compatibility issues associated with the proposed project would not result in any new significant adverse environmental impact beyond those previously identified in this EIR. The environmental effects of the project may, nevertheless, create potential nuisances that may result in incompatibility issues and those effects are considered within the context of this EIR. **This represents a less-than-significant impact.**

Conflict With Any Applicable Habitat or Natural Community Conservation Plan

There are no habitat or natural community conservation plans that apply to the project site. Therefore, the project would not conflict with any applicable Habitat or Natural Community Conservation Plans. An expanded discussion of this issue is provided in Section 4.4, Biological

Resources. **The project would not adversely impact any habitat or natural community conservation plans.**

Population/Housing

Development of the proposed project would not induce substantial population growth, displace a substantial number of existing housing units, or displace a substantial number of persons such that an adverse environmental impact would occur. While the project would potentially provide additional sources of employment for these employees, the project is not anticipated to induce substantial new population growth since at least some of these workers are anticipated to be relocating from elsewhere in the City. Any increase in job potential would be considered beneficial given the current jobs deficit during this current economic downturn. For more information concerning growth inducement, refer to Section 5.0 CEQA Considerations.

In order to accommodate project development, the proposed project would necessitate the removal of existing on-site structures. Project development would require the removal of an existing 44-unit apartment complex; an existing single-family residence was previously removed. The existing apartment complex is currently unoccupied. This does not represent a significant displacement of population, since the apartment complex is currently vacant. The project would not displace a significant amount of housing that would require the construction of replacement of housing elsewhere. **The project would have a less-than-significant impact on population and housing.**

4.10 NOISE

Introduction

The following discussion is based on a noise assessment for the project prepared by Brown-Buntin Associates (December 2011). This report is contained in Appendix G of this EIR.

Setting

Noise is defined as unwanted or objectionable sound. State and local regulations define objectionable noise levels and identify land use compatibility standards. The following analysis describes the characteristics of sound, the location of sensitive noise receptors, and the existing/future noise environment.

Sound is comprised of three variables: magnitude, frequency, and duration. The magnitude of air pressure changes associated with sound waves results in the quality commonly referred to as "loudness." Variations in loudness are measured on the "decibel" (dB) scale. On this scale, noise at zero decibels is barely audible, while noise at 120-140 decibels is painful and may cause hearing damage. These extremes, however, are not encountered in commonplace environments.

The second characteristic of sound is frequency. The human ear responds to sounds whose frequencies are in the range of 20 to 20,000 hertz. Within the audible range, subjective response to noise varies. People generally find higher pitched sound to be more annoying than lower pitched sounds. Noise is typically characterized using the A-weighted sound level or dBA. This scale gives greater weight to the frequencies to which the human ear is most sensitive.

The third characteristic of noise is duration. Annoyance due to noise is often associated with how long noise persists. To adequately describe a noise environment, it is necessary to quantify the variation in noise levels over time. Acoustical engineers often use a statistical approach that specifies noise levels that are observed to be exceeded over a given percentage of time.

For evaluating noise over extended periods, the "Day-Night Noise Level" scale (DNL) or "Community Noise Equivalent Level" (CNEL) are measures of the average equivalent sound level (L_{eq}) during a 24-hour period. The L_{eq} can be thought of as the steady sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period. The CNEL and DNL account for greater sensitivity of noise receptors at night by penalizing noise occurring during evening and nighttime hours.

Existing Noise Environment

The predominant noise sources in project area include traffic on local roadways, ventilation equipment associated with underground parking garage at the adjacent Fig Garden Financial Center, and aircraft over-flights from the Fresno-Yosemite International Airport. The project site is not directly affected by parking lot activities or other sources from the Fig Garden Shopping Center due to distance and acoustic shielding provided by existing intervening office and apartment buildings.

Existing ambient noise levels in the project area were measured as part of the noise study at two locations within or near the project site on May 12, 2010. The locations of the ambient noise monitoring sites are presented in Appendix G. The first site was located near the northeast corner of the proposed office building, approximately 50 feet from the center of W. San Jose Avenue. The site is predominantly affected by noise from vehicular traffic on W. San Jose Avenue,

residential maintenance activities at nearby properties, birds in nearby trees, and occasional aircraft over-flights. Distant train horns are also occasionally audible. Measured noise levels ranged from 40-74 dBA with an L_{eq} of 52.4 dBA. The second site was located west of the intersection of W. San Jose Avenue and N. Colonial Avenue, approximately 50 feet from the center of the intersection. Measured noise levels ranged from 47-75 dBA with an L_{eq} of 57.2 dBA. The DNLs for specific noise sources are further described below.

Traffic. Existing traffic volumes on W. San Jose Avenue adjacent to the project site are very low. The annual average daily traffic volume was estimated by the noise consultant based on data for Colonial Avenue, which connects to W. San Jose Avenue just west of the site. Based on an estimated average daily traffic volume of 500, the predicted noise level at 50 feet from the center of the roadway is less than 50 dB DNL.¹ This is well below the City's 60 dB DNL standard for transportation noise sources.

Aircraft. The project site is located approximately 4.5 miles northwest of the Fresno-Yosemite International Airport (FAT). The site is just south of the extended centerlines of the airport runways, and is therefore subject to aircraft over-flights. Aircraft typically depart to the northwest over the site, but aircraft arrivals occur over the site when required by wind conditions or other factors. Noise levels from individual arrivals by commuter propeller and regional jet aircraft were in the range of 55-65 dBA.

Noise levels from departing jet aircraft, especially California Air National Guard (CANG) jet aircraft, would likely be higher than noted above. According to the public information office at the 144th Fighter Wing of the CANG, the number of CANG aircraft operations at Fresno-Yosemite Airport has been slightly higher than normal in recent months due to new flight crew training requirements. Operation levels are expected to return to normal over the next few months. Also, it is possible that the F-16 aircraft now operated by the CANG may be replaced in 2-3 years by F-15 aircraft. Currently, the project site is located well outside the annual average 60 dB CNEL contours for existing or projected future aircraft operations at the airport.

Ventilation Fans. The existing office building located west of the project site utilizes ventilation fans for the underground parking garage. These include fans are located near the southwest and northwest corners of the project site. The fans were found to produce noise levels in the range of 60-66 dBA DNL, depending upon direction from the fan outlet grills, at a distance of 50 feet.

High Speed Rail. The proposed alignment for the California High Speed Rail (HSR) project would follow the existing Union Pacific Railroad (UPRR) line in the area of Shaw Avenue.² This is more than three miles from the project site. Since the HSR line would be at grade in this area, and noise would be attenuated due to distance from the source and other factors by at least 50 dB, noise or vibration from the HSR line would not be significant at the project site.

Sensitive Receptors

The proposed office building is considered a noise-sensitive land use according to the policies contained in the City's Noise Element. Sensitive noise receptors are also located adjacent to and near the project site. These include existing single-family homes to the east of the site and on the

¹ Using the Federal Highway Administration's (FHWA) noise prediction model.

² Draft Environmental Impact Report and Statement for the California High Speed Rail Project (August 9, 2011).

north side of W. San Jose Avenue, existing multi-family apartments to the south, and the existing office building to the west of the project site.

Regulatory Environment

2025 Fresno General Plan. The Noise Element of the City’s General Plan identifies compatibility standards for transportation-related noise sources and stationary noise sources. Public roadways and aircraft over-flights are considered transportation noise sources. Noise sources not related to traffic on public roadways, railroads or airports are considered to be stationary. This includes activities in common areas, use of mechanical equipment, and vehicular activities that do not occur on a public roadway.

For transportation noise sources, the Noise Element establishes land use compatibility criteria based on DNL. The exterior noise exposure criterion is 60 dB DNL in outdoor activity areas of residential uses, which generally include backyards of single-family residences and individual patios or decks of multi-family developments. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation. Outdoor activity areas, including yards and decks, are located in the neighborhood surrounding the proposed office use.

The Noise Element also requires that interior residential noise levels attributable to exterior transportation noise sources not exceed 45 dB DNL. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep. For stationary noise sources, the Noise Element establishes noise compatibility criteria in terms of the hourly equivalent sound level (L_{eq}) and maximum sound level (L_{max}). The standards are more restrictive during the nighttime hours, defined as 10 PM to 7 AM. The standards may be adjusted upward in order to be less restrictive if the existing ambient noise level without the proposed source already exceeds the standards.

In addition, an analysis of the project’s consistency with relevant noise policies is provided in Table 4.9-2 in Section 4.9 Land Use and Planning of this EIR. The project will be consistent with Objective H-1 of the 2025 General Plan and associated H-1 policies that call for the protection of residents from the ill effects of excessive noise exposure.

City of Fresno Municipal Code. The City of Fresno Municipal Code, Section 9-2701(a) (“Noise Ordinance”) prohibits excessive noise from noise sources not preempted from local control by existing federal or state noise regulations. This includes activities in common recreation areas, use of mechanical equipment, and vehicles not operated on a public roadway. A potential violation of the Noise Ordinance would exist if the existing ambient noise level would be exceeded by 5 dBA due to the proposed use. The noise standards identified in the Noise Element are more restrictive than the Noise Ordinance standards; therefore, the Noise Element standards were used to evaluate project impacts in the noise analysis.

Fresno County Noise Ordinance. The Fresno County Noise Control Ordinance (Fresno County Code Chapter 8.40) includes standards for exterior and interior noise that apply to noise exposure at residences, schools, hospitals, churches, and libraries. The ordinance provides exterior and interior noise standards to be achieved during both daytime and nighttime hours, and it provides limitations on construction activities. The Fresno County Noise Ordinance noise standards are consistent with the hourly noise level standards of the City’s Noise Element for stationary noise sources, although they are somewhat less restrictive than the City’s standards.

Thresholds of Significance

In accordance with the CEQA Guidelines, a project impact would be considered significant if the project would:

- expose persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- expose persons to or generation of excessive groundborne vibration or groundborne noise levels;
- have substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- have a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The significance criteria used to evaluate the project in the noise analysis and this EIR is summarized below.

Policy H-1-b of the Noise Element addresses significant project-related increases in ambient noise levels for evaluation of noise impacts. A significant increase is assumed to occur if a project causes the ambient noise level to increase by the amounts set forth below:

Where ambient noise levels are <60 dB :	an increase of 5 dB or more
Where ambient noise levels are 60-65 dB:	an increase of 3 dB or more
Where ambient noise levels are >65 dB :	an increase of 1.5 dB or more

The Noise Element does not specifically limit the hours during which construction can occur. However, it is common practice to limit construction hours to minimize construction noise impacts at nearby residential receptors. Although not specifically stated in the Noise Element, it is also a standard requirement for many jurisdictions that all construction equipment be properly maintained and muffled to minimize noise generation at the source.

The Fresno County Noise Ordinance noise standards are consistent with the hourly noise level standards of the City's Noise Element for stationary noise sources, although they are somewhat less restrictive than the City's standards; therefore, the City's standards are used in the assessment of noise impacts.

The City of Fresno does not have regulations that define acceptable levels of vibration. The Federal Transit Administration (FTA) has published vibration impact criteria for transit

activities.³ Although the FTA guidelines are intended for transit activities, they can reasonably be applied to other activities. To prevent vibration annoyance in residences, a vibration velocity level of 80 Velocity Level in Decibel Units (VdB) or less is suggested when there are fewer than 70 vibration events per day. A level of 100 VdB or less is suggested by the FTA guidelines to prevent damage to fragile buildings.

Impacts and Mitigation

Sensitive Receptors

Sensitive receptors in the immediate project area consist of existing residences south, east, and north of the project site. The nearest sensitive receptors are residential uses located about 60 feet north of the project site along San Jose Avenue.

Project Operational Noise

Project operation would result in two types of noise increases: 1) noise from additional traffic generated by the project, and 2) noise from activities associated with the operation of the office use.

Traffic Noise. The project could result in an increase in traffic on some roadways in the project area. The potential for significant increases in traffic noise exposure at off-site noise-sensitive uses was analyzed based on the traffic impact study and FHWA Model. Traffic noise modeling assumptions are summarized in Appendix G. Since the noise-sensitive uses of concern are residential uses, traffic noise exposure was calculated using the DNL metric.

Traffic noise levels were calculated at typical residential setbacks for selected roadways in the project area for existing and future (2030) conditions. Calculated DNL values with and without the project were compared to determine if the project would cause traffic noise levels to exceed the city/county 60 dB DNL exterior standard (Policy H-1-a) or result in a significant noise level increase (Policy H-1-b). Existing noise barriers or other noise mitigation features were not accounted for in the calculations since the analysis is intended to demonstrate the relative change in traffic noise exposure that could occur as a result of the project. A typical residential setback of 50 feet from the center of the roadway was assumed for all roadways to provide a worst-case assessment of traffic noise exposure. Many existing homes in the project area are located at greater distances from the roadway or are acoustically shielded from roadway traffic noise by intervening buildings or sound walls.

Cumulative (2030 with project) traffic exposure along the roadways analyzed could increase by up to 1.0 dB as a result of the project. Such increases are not considered significant as defined by the City's Noise Element. Additionally, the project would not cause traffic noise levels to exceed the city/county 60 dB DNL standard along any of the roadway segments analyzed.

Stationary Source Noise. Stationary noise sources associated with the project could affect off-site uses, including the operation of mechanical equipment and vehicle movements within the site. Such sources are collectively considered stationary noise sources.

³ U.S. Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Vehicle Movements. Vehicle access to the underground parking garage would be located on the east side of the proposed office building. Vehicles would utilize driveways located on the north and south sides of the building to access the surface parking lot on the east side of the building and the entrance to the underground parking garage (refer to Figure 3-5). Vehicles would pass as close as about 40 feet from the nearest noise-sensitive uses (residences) to the south and about 120 feet from the nearest residential uses to the north of the project site. The proposed project includes a six-foot high masonry wall along the south boundary of the site (as well as the north and east boundaries).

As previously noted, noise-sensitive receptors to the south and east of the project site are located in an unincorporated area of Fresno County. Noise-sensitive receptors to the north of the project site are located within the City of Fresno. The county's noise element applies a DNL standard of 60 dB to stationary noise sources, whereas the city's noise element applies hourly L_{eq} and L_{max} standards to stationary noise sources. The City's Noise Element standards for stationary noise sources are summarized in the setting section above.

The County's Noise Ordinance addresses the statistical distribution of noise over time. The county's hourly L_{50} and L_{max} standards are comparable to the hourly L_{eq} and L_{max} standards of the City's Noise Element. As previously noted, the City's Noise Element is more restrictive than its noise ordinance with regard to stationary noise sources.

The above-referenced six-foot high wall around the perimeter of the project site is expected to reduce noise from vehicle movements within the parking lot and driveways by a minimum of 5 dB. This is sufficient to achieve compliance with the daytime and/or nighttime hourly L_{50} standards of the County's Noise Ordinance and the 60 dB DNL standard of the County's Noise Element at all noise-sensitive receptors within the unincorporated area of the County. Noise from vehicle movements within the site are also not expected to exceed the hourly L_{eq} standards of the City's Noise Element to the north of the project site.

With respect to maximum noise levels, on-site vehicle movements would be expected to produce L_{max} values in the range of 55-60 dBA at the closest residential receptors to the south of the project site after acoustic shielding from the proposed masonry wall is taken into consideration. Such levels would not exceed the 65 dBA nighttime or 70 dBA daytime L_{max} standards of the County's Noise Ordinance. Maximum noise levels from on-site vehicle movements would also comply with applicable City standards at the closest residential receptors to the north of the site.

Mechanical Equipment. Mechanical equipment for the proposed office building includes ventilation fans for the underground parking garage. Other mechanical equipment, including a sump pump, would be located in the parking garage and would not generate noise or vibration perceptible outside the garage. Noise from ventilation fans associated with underground parking for the proposed office building have the potential to exceed applicable standards, depending upon project design. Typical maximum noise levels from such stationary sources are in the range of 60-70 dBA at a distance of 50 feet. Noise from ventilation fans for the parking garage, however, have the potential to exceed the City's noise standards of hourly maximum (L_{max}) of 70 dBA during the daytime hours (7 AM -10 PM) and 65 dBA during the nighttime hours (10 PM -7 AM) for stationary noise sources at the closest residential uses, representing a potentially significant impact. Mitigation is necessary to reduce this potentially significant impact to a less-than-significant level.

Impact **Operational noise from the proposed ventilation fans for the underground garage could exceed City noise standards, resulting in significant noise impacts on adjacent sensitive residential uses. *This is a significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation measures.***

Mitigation

4.10-1 The project proponent shall install new ventilation systems that limit noise levels to an hourly L_{eq} of 45 dBA or below at the closest off-site noise-sensitive uses by appropriate design and shielding of proposed fan inlet/outlet openings. This can include use of quiet-technology equipment, acoustical louvers, or acoustically absorptive treatments within air ducts. The proponent shall incorporate the appropriate fan design and/or shielding into final design plans and submit to the City of Fresno Development and Resource Management Department for review prior to issuance of a building permit.

Noise Impacts on Project

Noise levels from existing or future traffic on West San Jose Avenue or aircraft operations at FAT would not exceed 60 dB DNL exterior to the proposed office building. Assuming that the peak hour L_{eq} for combined traffic and aircraft noise sources would not exceed 65 dBA (a worst-case assessment), compliance with the city's 45 dBA hourly L_{eq} interior standard for office uses (Policy H-1-a) would require a minimum exterior-to-interior noise level reduction (NLR) of 20 dB ($65-45=20$). Since standard commercial office building construction will provide a minimum of 25 dB of NLR, the project will comply with city's interior noise level standard for office buildings provided windows and doors are closed.

Construction Noise

During construction of the proposed office building, noise from construction activities could potentially impact noise-sensitive land uses in the immediate area. Sensitive receptors in the immediate project area consist of existing residences south, east, and north of the project site. The nearest are residential uses located about 60 feet north of the project site along San Jose Avenue. Noise would be generated by demolition of existing structures, mass grading, infrastructure installation, and building construction. Construction activities associated would generate noise levels in the range of 77 – 90 dB at a distance of 50 feet, as shown in Table 4.10-1. Most of the noisiest heavy equipment is typically used for demolition, project grading, excavation, and utility installation.

Vibration from demolition and/or construction activities could occasionally be perceptible at the closest sensitive land uses. The primary vibratory sources during demolition or construction within the project area would likely be large bulldozers or excavators and loaded trucks. Typical bulldozer or loaded truck activities generate an approximate vibration level of 86-87 VdB at a distance of 25 feet. Typically, vibration levels must exceed 80 VdB before annoyance occurs or 100 VdB before building damage occurs.

Table 4.10-1 Typical Construction Equipment Noise Levels	
Type of Equipment	Maximum Level, dB (50 ft)
Backhoe	78
Concrete Saw	90
Crane	81
Excavator	81
Front End Loader	79
Jackhammer	89
Paver	77
Pneumatic Tools	85
Bulldozer	82
Source: Federal Highway Administration, <i>Roadway Construction Noise Model User's Guide</i> , January 2006.	

Construction noise or vibration are not usually considered to be significant impacts if construction occurring near noise-sensitive land uses is limited to the daytime hours, extraordinary noise-producing activities (e.g., pile driving) are not anticipated, and construction equipment is adequately maintained and muffled. In addition, construction activities would not occur between the hours of 10:00 PM and 7:00 AM, Monday through Saturday, in accordance with Fresno Municipal Code Section 10-109, which limits work hours “to between the hours of 7 AM and 10 PM on any day except Sunday.” Further restrictions on construction noise may be placed on the project as determined through the Conditional Use permit process.

The project would have less-than-significant noise impacts during construction with implementation of construction noise abatement measures defined above.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard Community Plan area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

The noise assessment for the project considered the cumulative impacts from traffic noise on the local roadway network under future (2030) conditions. The results indicate that the project-generated traffic noise would be less-than-significant, as shown in Table 4.10-2 below. In addition, the operational noise impacts of the project would be avoided by mitigation identified above. The cumulative projects identified in Table 5-1 would also be subject to state and local noise standards to minimize noise impacts.

The project would not result in a cumulatively considerable incremental effect upon noise impacts; therefore, the cumulative impact is less-than-significant.

Table 4.10-2 Cumulative (2030) Traffic Noise Impacts						
Roadway	Roadway Segment	DNL (dB) @ Typical Residential Setback¹				
		Existing	2030	Project	Change²	Significant?
Palm Ave	n/o Barstow Ave	69.9	71.0	71.0	0	No
	s/o Barstow Ave	70.1	70.7	70.8	+0.1	No
	n/o San Jose Ave	69.9	70.5	70.6	+0.1	No
	s/o San Jose Ave	69.7	70.4	70.6	+0.2	No
	n/o Shaw Ave	69.6	70.4	70.6	+0.2	No
	s/o Shaw Ave	68.1	69.4	69.5	+0.1	No
	n/o Gettysburg Ave	67.3	69.0	69.1	+0.1	No
Barstow Ave	w/o Palm Ave	65.4	65.9	65.9	0	No
	e/o Palm Ave	65.0	65.8	65.8	0	No
San Jose Ave	e/o Palm Ave	61.9	58.9	59.9	+0.1	No
Shaw Ave	w/o Palm Ave	71.6	72.2	72.2	0	No
	e/o Palm Ave	72.0	72.6	72.6	0	No
Gettysburg Ave	w/o Palm Ave	56.6	60.8	60.9	+0.1	No
	e/o Palm Ave	57.2	60.1	60.1	0	No
¹ A typical residential setback was assumed to be 50 feet from the center of the roadway. ² Reported changes determined by subtracting 2030 No Project noise levels from 2030 Project noise levels. Source: Brown-Buntin Associates, Inc.						

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4.11 PUBLIC SERVICES

Introduction

The Public Services section assesses the project's potential impacts on public services and recreation. To obtain information from public service providers, DD&A contacted the City of Fresno Police and Fire Department in order to gather information on existing fire and police facilities, staffing for the project area, and current and target response times. In addition, the Fresno Unified School District (FUSD) was contacted to obtain information on current student enrollment and school capacity figures.

Setting

Police

The Fresno Police Department is responsible for providing police protection services within the City of Fresno. The Department operates five policing districts in addition to the Department headquarters, which is located at 2323 Mariposa Mall. There four policing districts as follows: Southwest, Central, Southeast, Northeast, and Northwest. The district offices are located on 1211 Fresno Street (Southwest PD), 1617 S. Cedar Ave. (Southeast PD), 1450 E. Teague (Northeast PD), and 3781 N. Hughes Ave (Northwest PD). The project site is located within the Northwest Policing District.

While staffing levels have traditionally increased, the service area for police services has remained consistent over the past ten years even with the increases in population for the area. According to the Fresno Police Department 2008 Annual Report, the Police Department has provided services for a total of 104 square miles for over the past 10 years. Recently, however, the Fresno Police Department has been losing personnel due to budgetary constraints and high rates of attrition. In 2010, The City of Fresno Police Department had 811 sworn personnel and 242 non-sworn personnel (personal communication, former Captain Belluomini, June 23, 2010). Due to budgetary constraints, the City currently has 750 sworn personnel. This number is anticipated to decrease to approximately 680 personnel in 2012 (personal communication, Detective Todd Frazier, December 5, 2011). Table 4.11-1 details the statistics on calls for service for the Fresno Police Department for the complete 2008 year and the 2009 year for the months January through September. The average response time for life threatening emergency calls for the 2008 year was 6.35 minutes.¹

The proposed project is located within the Northwest District, which includes 40 square miles of service area.² As of June 2010, 85 sworn personnel are assigned to the Northwest District (personal communication, Captain Belluomini, June 23, 2010). The Northwest District, which consists primarily of the Bullard Community Plan area, is recognized as one of the fastest-growing districts in the City (ibid). The population of the Bullard area was 86,538 in 2000, and is projected to be 118,197 in 2025. This represents a growth of approximately 37%. Projected growth in the Northwest Policing District represents potential constraints on police protection services. The average response time for emergency calls in the Northwest District is 6.41 minutes.

¹ Office of the Chief of Police. 2008. Fresno Police Department 2008 Annual Report. Available at: <http://www.fresno.gov/NR/rdonlyres/86078065-3D7F-4A11-9644-6CDEB3BC6C56/0/2008FinalAnnualReport.pdf>.

² FBI Crime Index: 10 Year Profile. CrimeView Bureau. 2009. Fresno Police Department Monthly Crime Data: September 2009. September. Available at http://www.fresno.gov/NR/rdonlyres/8FBB5131-9B45-4EF1-A3FB-4442C44571F9/15893/UCRReport_September20091.pdf.

Category	2008 (Jan.-Dec.)	2009 (Jan.-Dec.)	2010 (Jan.-Dec.)
Person Crimes Total	2,781	2,933	3,034
Willful Homicide	40	42	45
Forcible Rape	80	86	70
Robbery	983	1,085	1,021
Aggravated Assault	1,678	1,720	1,898
Property Crimes Total	22,280	21,186	24,607
Burglary	4,173	4,423	5,262
Larceny	14,106	13,359	14,645
Arson	224	156	147
Police Reports	109,749	103,412	94,191
Calls for Service	443,911	432,320	409,080

Source: FBI Crime Index: 10 Year Profile. CrimeView Bureau. 2010. Fresno Police Department Monthly Crime Data: September 2011. Available at <http://www.fresno.gov/NR/rdonlyres/A9D853FB-EBA4-4900-8435-B880D98AE480/21386/UCRReportDecember2010.pdf>

Fire

The Fresno Fire Department provides both emergency prevention and response services to the City of Fresno, including a 336-square mile service area. The Fire Department Headquarters is located at 911 “H” Street, Fresno, CA 93721. There are 23 fire stations, besides the headquarters, and an Airport Rescue Fire Fighting station at the airport. The Fresno Fire Department includes 28 companies of firefighters divided into three battalions. The Fresno Fire Department staffs 19 engines, five trucks, and two aircraft rescue/firefighting apparatus. The Department employs 441 individuals, including 383 sworn positions; 79 firefighters are on-duty per shift (personal communication Rick Fultz, Supervising Fire Prevention Inspector, August 2, 2011).

The City maintains an aid agreement with the Fresno County Fire Protection District, under which the fire station within closest proximity to the emergency responds to the call. The City also has mutual aid agreements with surrounding fire jurisdictions that allow for multi-jurisdictional response to disasters or large fires. The Fresno Fire Department service area includes 111 square miles within the City of Fresno, 0.69 square miles in the Fig Garden area, 217 square miles in the North Central District, and 7.3 square miles in the Fresno County contract area. Typical fire related hazards in this area include both structural and non-structural risks. According to the 2007 Standards of Coverage analysis prepared by the Fire Department, nonstructural risks include emergency medical, hazardous materials, technical rescue, swiftwater, aircraft, firefighting wildland/urban interface, and disasters. Structural risks included airport facilities, various buildings throughout the service area, military installations, major highways and roadways that transverse the area, and canals and local water features.³

According to the City of Fresno Fire Department, the proposed project would be served by Station 11, which is located at 5544 North Fresno (personal communication, Mike Schmidt Fire Prevention Inspector Supervisor, May 25, 2010; Rick Fultz, Supervising Fire Prevention Inspector, August 2, 2011). Station No. 11 houses an engine operated by a crew of three, a ladder truck operated by a crew of four, and the regions only Urban Search and Rescue Team. Typical

³ City of Fresno Fire Department, (2007). Standards of Coverage. Available at: <http://www.fresno.gov/NR/rdonlyres/DF2AF39F-E0F3-4F59-BEE2-E446CD26DC30/0/StandardsofCover2007.pdf>

travel times vary depending on the proximity of the station.⁴ According to the Fire Department, travel time to the project site would be less than four minutes, which is the Department's travel time service benchmark of four minutes 90 percent of the time (ibid). The Fresno Fire Department currently has a "Class 3" Insurance Service Office fire protection class rating. A total of 32,860 emergency calls were responded to by the Fresno Fire Department in 2010.

Emergency response involving a medical incident is provided by the American Ambulance Company. American Ambulance is the sole 911 provider for the Exclusive Operating Area of Kings County and Fresno County. American Ambulance's service area is approximately 4,000 square miles and the company responds to approximately 80,000 calls annually. American Ambulance employs 450 personnel and maintains more than 70 ambulances. American Ambulance provides EMS, ambulance transport, critical care transport, Specialized Trauma ALS Rescue, and air transport services. Typical emergency response times tend to vary depending on the proximity of the accident to the dispatch center, availability of resources, and type of medical emergency. Average response times to an emergency in the last six months were 5.16 minutes (personal communication, American Ambulance Company, May 2011).

Schools

According to the City of Fresno General Plan, the Fresno metropolitan area is served by several school districts, including Fresno Unified School District (FUSD), Clovis Unified, Central Unified, Sanger Unified, Fowler Unified, West Fresno, and Washington Union High School. The sizes of these districts range from one of the state's largest (approximately 80,000 students) to an elementary school district with one school campus (325 students). The project site is located within the boundaries of the FUSD. The FUSD is the fourth largest school district in California, operating 64 elementary schools, 15 middle schools, eight high schools, four alternative schools, and three special education schools.⁵ According to FUSD, the project is located within the attendance areas for Kratt Elementary, Tenaya Intermediate, and Bullard High School. Table 4.11-2 depicts current student enrollment and student capacity.

School	Grade Level	Student Enrollment	Capacity
Kratt	K-6	515	600
Tenaya	7-8	974	1,009
Bullard	9-12	2,651	2,650

Source: Fresno Unified School District, 2010.

Libraries

The Fresno County Public Library provides public library services to Fresno County, including the project area. The nearest library facility to the project site is the Fig Garden Regional Library located at 3071 West Bullard Avenue in Fresno. The project is not expected to generate impacts

⁴ Please note the differences between "travel time" and "response time" as it relates to fire protection services. Specifically, "travel time" is defined as the amount of time necessary to travel from the fire station to the scene, whereas "response time" includes the time necessary to process the emergency in addition to the "travel time." For the City of Fresno, the travel time goal is four minutes, 90% of the time.

⁵ Fresno Unified School District. March 23, 2010. District at a Glance Fact Sheet. Available at: <http://www.fresno.k12.ca.us/pdf/fact-sheets/district-at-a-glance-fact-sheet.pdf>.

to libraries and other public facilities. These impacts are anticipated to be less-than-significant and aren't evaluated in detail in this EIR. The project will, however, be subject to the imposition of applicable County of Fresno Public Facility Impact fees in effect at the time a building permit is issued.

Recreation

The City of Fresno Department of Parks, After School, Recreation, and Community Services operates parks and recreational facilities throughout the City. The department manages 1,604.5 acres of parks and other recreational facilities including regional, community, and neighborhood parks that offer both active and passive recreational amenities. Active recreational facilities include a mix of recreational uses and may include athletic fields, hard courts, children's play areas, and structures for recreational activities. Passive recreational facilities are generally undeveloped or minimally improved lands that include landscaped areas, non-landscaped open space, trail systems, and other similar uses. Parkland is further classified according to type and size. According to the General Plan, the following types of parks can be found within the City.

- **Mini-Parks** ("Pocket Parks"). Small parks, generally less than two acres, located near higher-density development. These parks are designed to serve a limited population or group within about a one quarter mile radius. Such parks are typically between 0.25 to 2.0 acres in size and provide limited amenities that may include play equipment, seating, picnic areas, and landscaping. As a general rule, these small parks are best suited to providing landscaped, shaded areas for passive enjoyment. While mini-parks may serve smaller neighborhoods, their size makes them inefficient and more costly to maintain (per person served).
- **Neighborhood Parks.** Semi-active parks of five to ten acres, designed to serve residents living within a one mile radius of the site, or to serve between 10,000 and 15,000 residents. In addition to irrigated landscaping, typical improvements for neighborhood parks include softball/soccer fields, lighted tennis courts, lighted multi-purpose courts, tot lots, picnic areas, restrooms, equipment checkout rooms, and parking lots. Whenever possible, neighborhood parks are to be located adjacent to elementary schools to facilitate cooperative arrangements.
- **Community Parks.** These parks are ideally 20 acres in size. They are intended to serve residents living within a two to four mile radius, or to serve a population of between 50,000 and 80,000 residents. Community parks may have lighted sport fields and specialized equipment not found in neighborhood parks. The community park is the nucleus of the park system, where members of the community can congregate for area-wide functions or programs
- **Regional Parks.** These parks are generally 100 or more acres. They are developed to serve residents living within each quadrant of the city. This type of park serves a population of approximately 100,000 residents with active and passive recreational opportunities. In addition to facilities for various outdoor sports, regional park improvements may include picnic shelters, hiking trails, lakes, streams, public gardens, and other amenities not normally located in an urban setting. These parks are the only city recreational sites large enough to set aside wildlife habitat and offer non-programmed, nature-oriented recreational opportunities.

The nearest park facilities to the project site are Cary Park, located on Fresno Street near Gettysburg Avenue and Robinson Park, located on Fresno Street near Bullard Avenue. Oso De Oro Park is also located in close proximity to the project site; it is located near the Barstow and Forkner Avenue intersection. The Oso de Oro Park also serves as a ponding basin for FMFCD.

These parks are not within walking distance of the site. In addition, recreational facilities are provided at nearby Bullard High School. The City of Fresno has an Open Space standard of three acres of parkland per every 1,000 residents. Currently, according to the City of Fresno, the City has insufficient parkland. In addition, there are also other recreational amenities within the Fresno area, including golf courses, ponding basins, and other public and non-profit operated recreational open space, as well as the Millerton State Park. For more information regarding recreational amenities within the City of Fresno and surrounding vicinity, please refer to the City of Fresno 2025 General Plan and associated Master EIR.

Regulatory Environment

2025 Fresno General Plan. The 2025 Fresno General Plan contains policies pertaining to the provision of public services within the City of Fresno. According to the 2025 Fresno General Plan, the primary objective related to the provision of police services calls for the City to provide “the level of law enforcement and crime prevention services necessary to maintain a safe, secure, and stable urban living environment through a police department that is dedicated to providing professional, ethical, efficient and innovative service with integrity, consistency and pride” (see E-24). The General Plan further states that the primary objectives related to fire protection are to: 1) ensure that fire protection services are provided in an adequate, efficient and cost effective manner; 2) ensure that the Fire Department's staffing and equipment resources are sufficient; and 3) enhance the level of fire protection to meet the increasing demand for services from an increasing population (please refer to E-25 through E-27). The General Plan also provides policies to ensure adequate access to schools and recreational amenities (see E-28, E-29, and F-1 through F-6). Please refer to Table 4.9-2 of Section 4.9 Land Use and Planning of this EIR for a detailed analysis of the project’s consistency with the relevant provisions of the 2025 General Plan.

The 2025 Fresno General Plan Master EIR identified that buildout according to the 2025 General Plan would result in several significant direct impacts related to public services. Specifically, the Master EIR determined that buildout would result in significant impacts associated with the provision of new or expanded police, fire protection, and recreational facilities due to the increase in population and human activities in the metropolitan area. The Master EIR identified specific mitigation, including site specific environmental review, to ensure that new or expanded facilities would be required to avoid and/or mitigate potential adverse environmental impacts associated with facility construction and/or expansion. The Master EIR determined that all potential impacts associated with public services could be reduced to a less-than-significant level.

Bullard Community Plan. Since the adoption of the 1984 Fresno General Plan, the City Council has adopted several community and specific plans. The proposed project is located within the boundaries of the Bullard Community Plan, which was adopted in 1988. Although the 2025 General Plan was adopted more recently, the provisions of this plan are still applicable to development considerations within the planning area unless specifically amended in the 2025 General Plan. No updates to the Bullard Community Plan related to public services, schools, or parks and recreation were identified in the 2025 General Plan. The primary public service goal of the Bullard Community Plan is to ensure that sufficient capacity and efficient public services are available to accommodate growth within the planning area.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public services:
 - fire protection
 - police protection
 - schools
 - parks
 - other public facilities⁶
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands;
- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impacts and Mitigation

Police

Development of the proposed project would incrementally increase demands for police protection services associated with the construction and subsequent occupancy of the proposed office complex. This could increase the number of police services calls associated with disturbances, property crimes, traffic, and misdemeanors among other types of crime. The incremental increase in the demand for police protection services associated with the proposed project has the potential to adversely affect average response times to a police emergency. Currently, the Fresno Police Department's existing response time varies depending on the nature of the emergency. The Department has identified that its current response time for life threatening calls is 6.41 minutes. Due to ongoing budgetary constraints and a high rate of attrition, the Department has identified that the project would represent an incremental increase in demand for services that could potentially impact emergency response times.

An impact is significant under CEQA if the additional demand for services would require the construction or expansion of a new or existing facility in order to meet project generated demands. In this instance, an impact would be significant if a project adversely impacted existing response times such that a new or expanded facility would be necessary to accommodate the

⁶ Impacts related to other public facilities related to utility services (e.g. landfill capacity, wastewater treatment capacity, etc.) are evaluated elsewhere in this EIR. Please refer to **Section 4.13 Utilities and Service Systems** for more information.

additional demand. Police protection services would be provided to the project site from the existing Northwest District Station, which is situated on 3781 N. Hughes Ave, approximately three miles from the project site. Estimated response time to the project site is contingent upon the type of emergency, but the Police Department has estimated that average response would be 6.41 minutes for a life threatening emergency. The project site is located in an area currently served by the Police Department; the Department would not need to expand its existing service area or construct a new facility to serve the project site. Although the project would be served by an existing facility, the Police Department has recognized that the project may, albeit insignificantly, adversely impact response times to an emergency. Additional service personnel and/or staff may be necessary to maintain the current level of services. The need for additional staff and equipment would, not, however, require the expansion or construction of new or existing facilities; the project site would continue to be served by the main Northwest District Station (personal communication, Detective Todd Frazier, September 28, 2011).

In order to minimize potential impacts to police protection services, the City of Fresno requires that all new developments, as a condition of project approval, contribute their fair share towards the provisions of those services as part of the Police Facilities Fee, which is contained in Chapter 12, Article 4.8 of the Fresno Municipal Code. Accordingly, the proposed project would be required to pay all applicable Police Facilities Fees as stipulated in Article 4.8 of Chapter 12 of the Fresno Municipal Code. Payment of the Police Facilities Fee is considered adequate mitigation to ensure that the proposed project adequately addresses potential project induced impacts. Moreover, the project is not expected to necessitate the construction or expansion of existing or new facilities. While the proposed project would not necessitate the construction of new or expanded facilities, the City of Fresno Police Department recommends that the project include video surveillance equipment to monitor the areas, as well as private security. It is recommended that these measures be incorporated as project conditions. The incremental demand for police protection services associated with the project would not cause a significant environmental impact under CEQA. An impact is significant, if and only if, a project, due to its demands for police protection services, would require the construction of a new facility or the expansion of existing facility to meet project-generated demands. **Accordingly, the project would have a less-than-significant impact in regard to this CEQA consideration**

Fire

Project development would result in an incremental increase in demand for fire protection services due to the introduction of a new commercial office building within the project area. As identified above, the project site would be served by Station 11, which is located at 5544 N. Fresno, approximately 0.5 miles from the project site. According to the Fire Department, response times to the project site would be within the Department's stated goal of four minutes. As a result, the project would not adversely impact the Department's ability to provide fire protection services within the project area or adversely impact target response times such that additional facilities would need to be constructed (personal communication, Rick Fultz, Supervising Fire Prevention Inspector, August 1, 2011).

This project, as a condition of approval, would be required to pay all applicable Fire Facilities fees as stipulated in Article 4.9 of Chapter 12 of the Fresno Municipal Code. The payment of fees is necessary to ensure the project contributes its fair share of costs associated with the provision of fire protection services. The payment of impact fees, as a condition of approval, would ensure that potential impacts are minimized to a less-than-significant level. In addition, the proposed project will be required to comply with applicable fire safety standards as a condition of approval. In addition, the project would be adequately served by existing facilities, namely Station 11. Therefore, the proposed project is not expected to necessitate the construction or expansion of

existing or new facilities. As a result, the incremental demand for fire protection services associated with the project would not cause a significant environmental impact under CEQA. An impact is significant, if and only if, a project, due to its demands for fire protection services, would require the construction of a new facility or the expansion of existing facility to meet project-generated demands. Accordingly, the project would have a less-than-significant impact in regard to this CEQA consideration.

Development of the proposed project would not impair or otherwise physically interfere with an adopted emergency response plan or emergency evacuation plan. In addition, the project would not expose people or structures to a significant risk involving a wildland fire. The project would occur within an urban area that is surrounded by existing development; a portion of the site is developed with a vacant 44-unit apartment complex. Due to the urban nature of the project site and its surroundings, wildland fires are not considered to pose a significant threat to the project. Moreover, the proposed project would not physically interfere with an adopted emergency response or evacuation plan since the site is not located in an area that is subject to an emergency response plan (personal communication, Mike Schmidt, Fire Inspection Supervisor, May 28, 2010). A project would result in a potentially significant impact under CEQA if it would impair or physically interfere with the implementation of an adopted emergency response or expose persons or structures to wildland fire hazards. In this case, the proposed project would neither interfere with an adopted emergency response plan nor expose people or structures to wildland fire hazards.

The project site would be served by existing emergency response medical providers, American Ambulance Company, which has indicated that emergency response times would vary depending on the type of emergency, proximity to the nearest responder, and other factors. Average response times would be approximately 5.16 minutes (personal communication, American Ambulance Company, May 2011). The project is not anticipated to result in a substantial increase in population such that American Ambulance would be unable to provide emergency response services to the project site and meet existing obligations. Moreover, design-level measures will be incorporated into the final design of the project as a condition of approval. Therefore, this represents a less-than-significant impact.

The proposed project, as a condition of approval, will be required to comply with all applicable fire and building safety codes (California Building Code and Uniform Fire Code) to ensure adequate fire safety elements are incorporated into final project design, including the providing minimum turning radii for fire equipment. Proposed driveways will be required to provide appropriate widths and turning radii to safely accommodate emergency response and the transport of emergency/public safety vehicles. The project will also be designed to meet Fire Department requirements regarding fire flow, water storage requirements, hydrant spacing, infrastructure sizing, and emergency access. As a result, appropriate fire safety considerations will be included as part of the final design of the project. Based on the above analysis and communication with the Fresno Fire Department, the proposed project would not impact the Department's ability to provide fire protection services within the project area. **The project, therefore, would have a less-than-significant impact on fire protection services.**

Schools

The proposed project site is located within the attendance areas of Kratt Elementary, Tenaya Intermediate, and Bullard High School. Development of the proposed office use would not directly result in an increase in the student population (personal communication, Deana Clayton, July 28, 2011). As a result, project development would not result in the need to construct new facilities since it would not generate new school-aged children. The proposed project, therefore,

would not directly impact school services. In addition, based on the above, the project would not have any indirect impact associated with the transportation to or construction of school facilities.

In 1998, California voters passed Proposition 1A, a statewide school bond measure. Proposition 1A was linked to legislation enacted in 1998 (SB 50) that significantly limited the application of CEQA to consideration of school impacts and mitigation. Government Code sections 65995-65998, part of SB 50, collectively provide that payment of school impact fees by new development is the exclusive means of “considering and mitigating impacts on school facilities that occur or might occur as a result of any legislative or adjudicative act, or both, by any state or local agency involving, but not limited to, the planning, use, or development of real property” (§65996(a)). The legislation further provides that the payment of school impact fees “are hereby deemed to provide full and complete school facilities mitigation” under CEQA (§65996(b)).

Impact **Although project development would not result in a direct increase in student population, the project would indirectly increase demands on school services. This would represent a potentially significant impact that can be reduced to a less than significant level with implementation of the following mitigation measures.**

Mitigation

4.11-1. The applicant shall pay a school impact fee pursuant to the criteria set forth within California Government Code Section 65995. Prior to the issuance of building permits, the applicant shall pay required school mitigation fees, subject to the review and approval of the City of Fresno and Fresno Unified School District. The fees set forth in Government Code Section 65996 constitute the exclusive means of both “considering” and “mitigating” direct impacts upon school facilities [Government Code Section 65996(a)].

Recreation

For the purposes of this analysis, a project would constitute an adverse impact to parks and recreational uses if projected population growth would result in the overuse and subsequent deterioration of existing facilities. The overuse of a facility is likely to occur when there are inadequate park and recreational facilities available to meet additional demands in the surrounding area. The City of Fresno has identified that there is inadequate parkland within the City’s boundary to meet existing demand.

Development of the proposed project would not directly result in an increased demand for park and recreational facilities such that new facilities would be required. The proposed project would not result in direct increase in residential population in the project area that would correspond with an increase demand for park and recreation facilities, which could 1) increase demand such that new facilities would be required; 2) increase the use of existing neighborhood and regional parks such that substantial physical deterioration would occur; or 3) require the construction or expansion of recreational facilities such that an adverse environmental affect might occur. Although the City of Fresno has identified that there is currently insufficient parkland to achieve the General Plan’s standard of 3.0 acres of parkland per every 1,000 residents, the project would not directly increase the residential population such that new park facilities would be required.

The proposed project could, however, have a minor indirect demand for recreational facilities in the immediate project vicinity as a result of future site occupants utilizing recreational neighboring recreational amenities (e.g., during lunch hour). Indirect demand for park and recreational facilities would not necessitate the construction of a new facility or cause the

deterioration of an existing facility. These additional demands associated with future employees utilizing area resources would not cause a significant adverse environmental affect; the City has identified an existing need for parkland and an adopted fee program is in place to collect fees for the purposes of procuring additional parkland. The additional demand associated with the proposed project would not result in any new or immediate need for the construction or expansion of a new or existing facility or result in the overuse of existing facilities.

In order to avoid potential impacts to parks and recreational facilities the City of Fresno requires that all new developments, as a condition of project approval, contribute their fair share towards the provisions of park facilities as part of the Park Facilities Fee, which is contained in Chapter 12, Article 4.7 of the Fresno Municipal Code. Accordingly, the proposed project would be required to pay all applicable Park Facilities Fees as stipulated in Article 4.7 of Chapter 12 of the Fresno Municipal Code. Payment of this fee is considered adequate mitigation to ensure that the proposed project adequately addresses potential project induced impacts. **Payment of these fees as a condition of approval would ensure that the project would have a less-than-significant impact in regard to park and recreational amenities.**

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard Community Plan Area. Proposed development considered in the cumulative analysis is identified in Table 5-1 (see Section 5.0 CEQA Considerations).

The incremental increase in demand for the provision of fire protection, police protection, schools, and park facilities associated with the proposed project, in conjunction with other cumulative development, represents a cumulative impact. While the development of the proposed project and other projects occurring within the region would result in an increased demand for public services, each project would be required to contribute its proportionate share towards the provision of these services. Although the incremental demands associated with past, present, and future development represents a cumulative impact, the payment of impacts fees, including the project-specific fees, and other measures would ensure that the project's incremental impacts are not cumulatively considerable. **The project would have a less-than-significant cumulative impact on public services.**

4.12 TRANSPORTATION & TRAFFIC CIRCULATION

Introduction

The following discussion is based on a traffic impact study prepared for the project by TPG Consulting (December 2011). This report is contained in Appendix H of this EIR. The methodology and technical assumptions for the traffic impact study, including the study locations, scenarios evaluated, study time periods, and recommendations were established in coordination with the City of Fresno Traffic Engineering Division, the County of Fresno, and the California Department of Transportation.

Setting

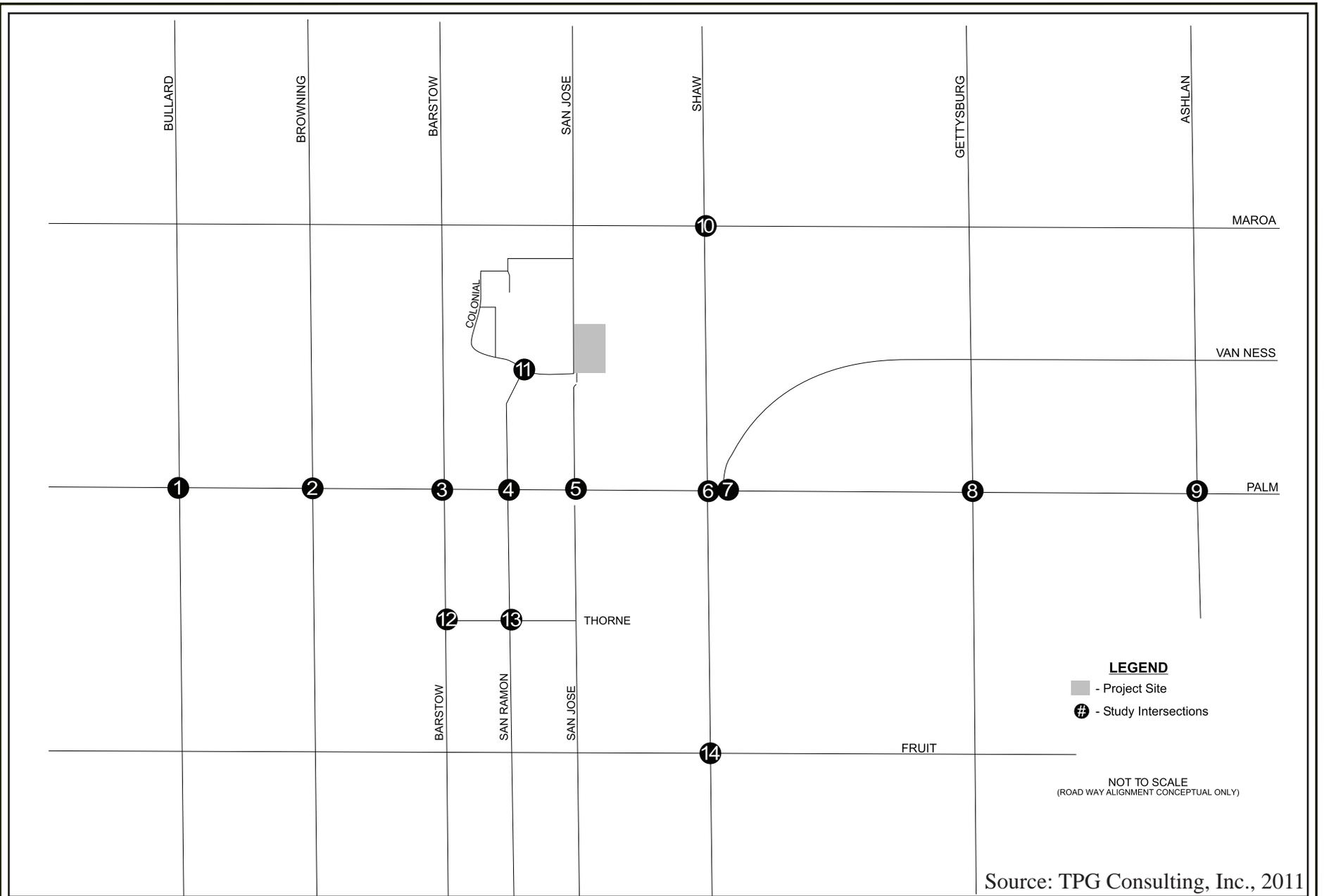
Roadway System

The project site is located near the northeast corner of Palm Avenue and Shaw Avenue, and is bounded by N. Palm Avenue and the Fig Garden Financial Center to the west, W. San Ramon Avenue, N. Colonial Avenue and W. San Jose Avenue to the north, the Fig Garden Village shopping center to the south, and single- and multi-family residential development to the north, south, and east.

The roadway network in the project area is presented in Figure 4.12-1. A summary of existing roads in the project area, including classification, number of lanes, and speed limits is provided in Table 4.12-1 below. Regional access to the site is provided by the freeway facilities of State Routes 99 and 41, located approximately three miles to the west and one mile to the east, respectively.

Street	Classification	No. of Lanes (2 dir)	Posted Speed Limit (mph)
Bullard Ave	Arterial	4	40
Browning Ave	Local	2	35 ¹
Barstow Ave	Collector	2	35 ¹
San Ramon Ave	Local	2	NPS
San Jose Ave	Local	2	NPS
Shaw Ave	Arterial	6	40
Van Ness Blvd	Local	2	25
Gettysburg Ave	Collector	2	30
Ashlan Ave	Arterial	2	30 ¹
Fruit Ave	Collector	2	40 ¹
Thorne Ave	Local	2	NPS
Palm Ave	Arterial	4	40 ¹
Colonial Ave	Local	2	NPS
Maroa Ave	Collector	4	35

¹ posted 25 mph school zone for portions of the study segments
NPS = no posted speed limit; residential or business district subject to 25 mph speed limit



Roadway Network and Study Intersections

Figure
4.12-1

Traffic Impact Study and Methodology

A traffic impact study was prepared for the project by TPG Consultants (December 2011, see Appendix H). This traffic study was prepared in coordination with the City of Fresno Traffic Engineering Division and in accordance with the City of Fresno's *Traffic Impact Study Report Guidelines* (March 2006). The California Department of Transportation and Fresno County were also consulted as part of the Notice of Preparation and scoping process for the EIR.

Traffic conditions were analyzed for intersections and roadway segments based on level of service (LOS) evaluations. LOS is a measure of roadway quality of service based on demand and capacity of the roadway. LOS describes traffic conditions on a scale of A to F, with LOS A indicating free flow conditions with minimum delay and LOS F representing severe congestion with major delay. Traffic conditions at the intersections and roadway segments were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7 AM - 9 AM and the PM peak hour is generally between 4 PM - 6 PM.

The study area for the traffic analysis extends from Bullard Avenue (north) to Ashlan Avenue (south), and from Fruit Avenue (west) to Maroa Avenue (east). The traffic impact study analyzed 14 intersections and 11 roadway segments for the weekday AM and PM peak hours. Unsignalized and signalized intersection LOS were calculated using the *Synchro 7.0* software, which is an industry standard and recognized for use in the City of Fresno. The *Synchro 7.0* software is based on the *2000 Highway Capacity Manual (HCM 2000)* methodology, also an industry standard. Roadway segment levels of service were calculated using the unadjusted *2007 Florida Tables*. Signal warrants were prepared using the *California Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*.

Queue lengths for the movements at the study intersections were calculated based on the LOS calculations. The signalized intersection queue lengths are not calculated using the *HCM 2000* methodology. Rather, the queue length calculations for the signalized study intersections are calculated using *Synchro 7.0* methodologies (presented in Appendix H).

To analyze the traffic impacts resulting from the project, the following five scenarios were evaluated:

1. Existing Traffic Conditions (2011)
2. Existing Plus the Project Traffic Conditions
3. Existing Plus Approved Projects Plus the Project Traffic Conditions
4. 2030 No Project Traffic Conditions
5. 2030 Plus the Project Traffic Conditions

The Council of Fresno County Governments (COFCG) is the state Regional Transportation Planning Agency and federal Metropolitan Planning Organization for Fresno County, and is responsible for developing and maintaining a traffic simulation model for the County. Modeling activities are monitored by a Model Steering Committee that includes representatives from local agencies, private consultants, and others. The land uses contained in the model were developed using the land use assumptions in the General Plans for Fresno County and the cities of Fresno and Clovis. Growth increments developed from the COFCG Traffic Model (model) were used to

develop the 2030 No Project volumes. The model years used to develop the 2030 No Project growth increments were 2011 and 2030.¹

The traffic impact study evaluated the following 11 roadway segments and 14 intersections:

Roadway Segments

1. Shaw Avenue – Maroa Avenue to Palm Avenue
2. Shaw Avenue – Palm Avenue to Fruit Avenue
3. Palm Avenue – Bullard Avenue to Barstow Avenue
4. Palm Avenue – Barstow Avenue to San Ramon Avenue
5. Palm Avenue – San Ramon Avenue to San Jose Avenue
6. Pam Avenue – San Jose Avenue to Shaw Avenue
7. Palm Avenue – Shaw Avenue to Gettysburg Avenue
8. San Jose Avenue – Colonial Avenue to Maroa Avenue
9. San Ramon Avenue – Palm Avenue to Fruit Avenue
10. Barstow Avenue – Palm Avenue to Fruit Avenue
11. Thorne Avenue – Barstow Avenue to San Ramon Avenue

Intersections

1. Barstow Avenue/Palm Avenue (Signalized AU)
2. Browning Avenue/Palm Avenue (Signalized AU)
3. Bullard Avenue/Palm Avenue (Signalized AU)
4. San Ramon Avenue/Palm Avenue (Unsignalized TWSC)
5. San Jose Avenue/Palm Avenue (Signalized AU)
6. Shaw Avenue/Palm Avenue (Signalized AU)
7. Van Ness Boulevard/Palm Avenue (Unsignalized TWSC)
8. Gettysburg Avenue/Palm Avenue (Signalized AU)
9. Ashlan Avenue/Palm Avenue (Signalized AU)
10. Barstow Avenue/Thorne Avenue (Unsignalized TWSC)
11. San Ramon Avenue/Thorne Avenue (Unsignalized TWSC)
12. Shaw Avenue/Fruit Avenue (Signalized AU)
13. Shaw Avenue/Maroa Avenue (Signalized AU)
14. San Ramon Avenue/Colonial Avenue (Unsignalized No Control)

AU = actuated uncoordinated

TWSC = two-way stop-control

LOS evaluations were not performed for freeways and ramp intersections (i.e., State Routes 41 and 99), due to the size and location of the project relative to the freeway facilities. The City of Fresno and Caltrans agreed that for the project, because it is relatively small and not located immediately adjacent to any freeways, the LOS evaluation for Caltrans facilities would be limited to project trip traces through adjacent interchanges and calculation of the project's proportionate fair share contribution to potential improvements. This is discussed further below under "Impacts and Mitigation."

¹ The 2011 and 2030 model years were used to create the 2030 No Project growth increments for the study roadways; for those movements that showed negative or less than 1% growth by 2030, a 1% growth factor was applied to the existing count data to generate the 2030 No Project volumes to represent a worst-case scenario.

Bicycle Facilities

Bicycle lanes currently exist in the following locations within the project area:

- Browning Avenue at Palm Avenue – west leg
- San Jose Avenue at Palm Avenue – north leg, south leg
- Palm Avenue at Barstow Avenue – south leg, east leg, west leg
- Palm Avenue at Bullard Avenue – north leg, west leg, east leg
- Palm Avenue at Shaw Avenue – north leg
- San Ramon Avenue at Palm Avenue – north leg, south leg
- Barstow Avenue at Thorne Avenue – east leg, west leg

According to the *2010 Fresno Bicycle, Pedestrian, and Trails Master Plan* and the *City of Fresno Circulation Element*, bike lanes are planned along Palm, Shaw, Fruit, and Maroa Avenues in the study area. Bike lanes provide for a striped lane for one-way travel on a street or highway. The project is not anticipated to make changes to the existing bicycle facilities in the study area.

Pedestrian Facilities

Sidewalks exist on all legs of the study roadways, *except* at the following locations:

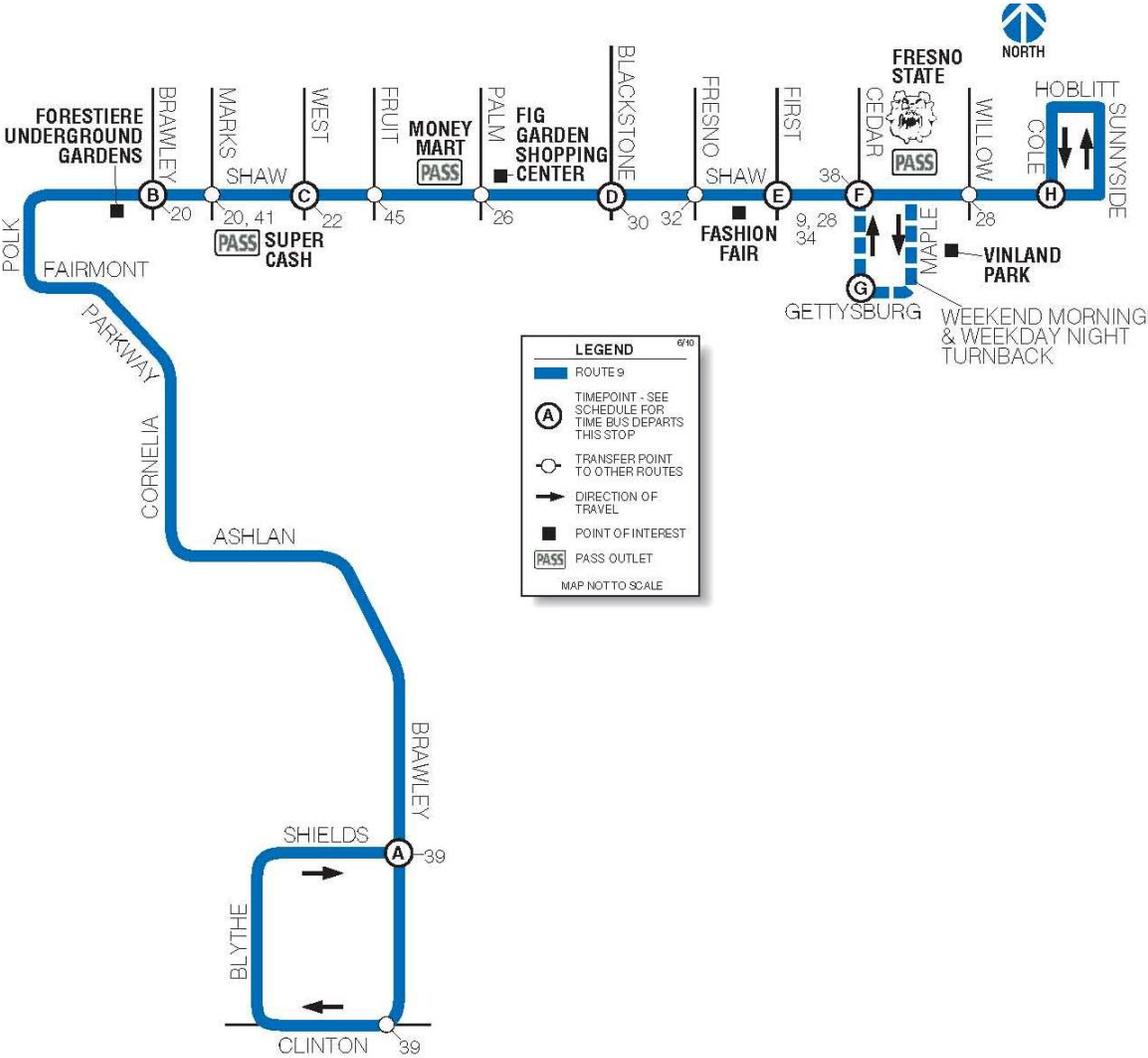
- Bullard Avenue: north and south sides – east and west of Palm Avenue
- Browning Avenue: north and south sides – east and west of Palm Avenue
- Barstow Avenue: south side – Fruit Avenue to Palm Avenue
- San Ramon Avenue: north and south sides – Fruit Avenue to Colonial Avenue
- San Jose Avenue: north and south sides – Palm Avenue to eastern terminus (office building driveway); north and south sides – eastern Project boundary to Maroa Avenue
- Gettysburg Avenue: north side – east and west of Palm Avenue; south side – east of Palm Avenue
- Ashlan Avenue: north side – west of Palm Avenue
- Palm Avenue: east and west sides – Bullard Avenue to San Madele Avenue; east side – San Ramon Avenue to Fig Garden Middle driveway; west side – San Jose Avenue to Shaw Avenue; west side – Alamos Avenue to Gettysburg Avenue; east side – Santa Ana Avenue to Gettysburg Avenue
- Thorne Avenue: east and west sides – Barstow Avenue to San Jose Avenue
- Colonial Avenue: west side – north terminus to San Jose Avenue
- Maroa Avenue: east and west sides – south of Shaw Avenue

The project is not anticipated to make any changes to study area pedestrian facilities other than to construct a sidewalk along the project frontage on San Jose Avenue.

Transit Service

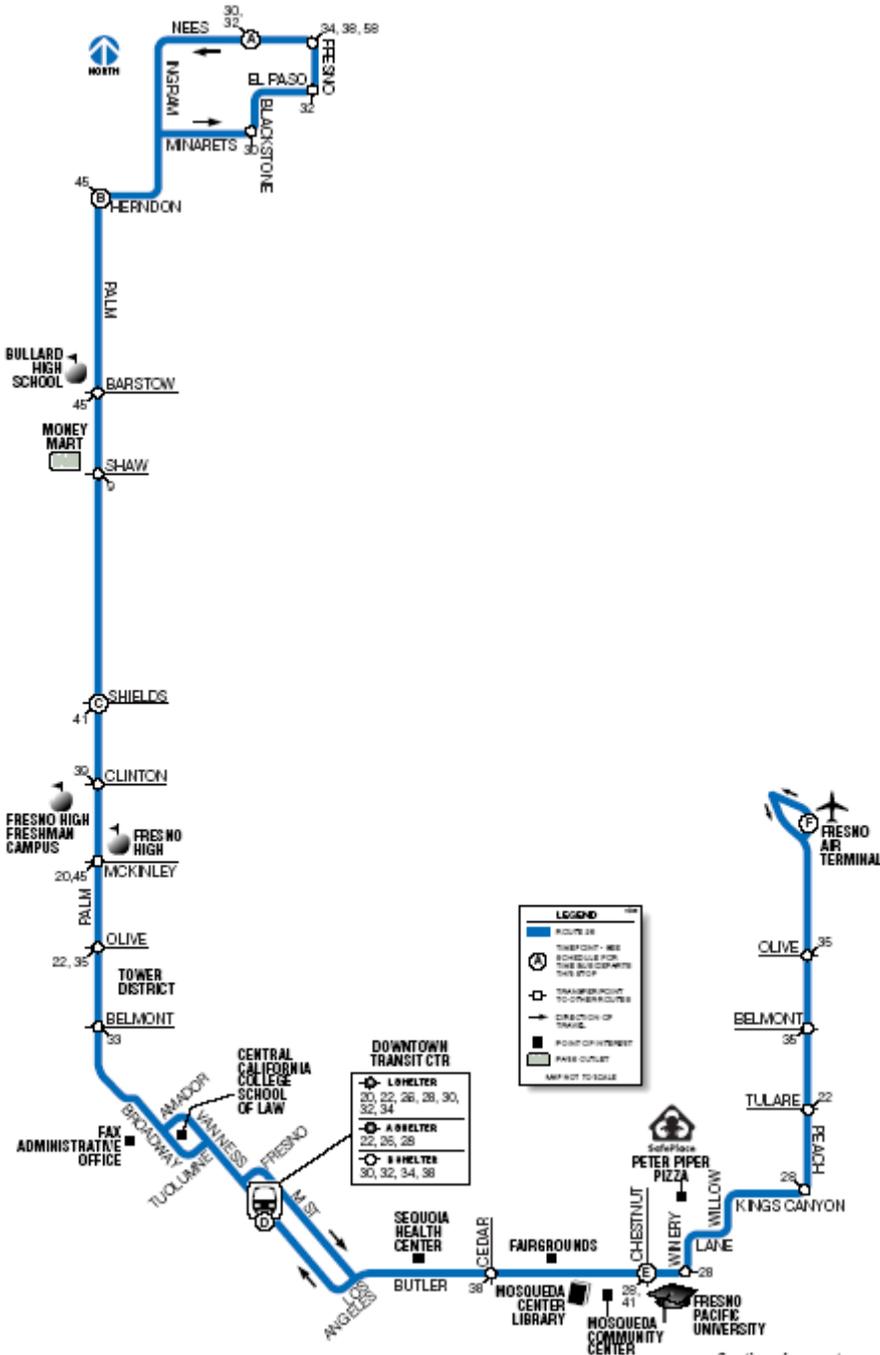
Transit services in the project area are provided by the Fresno Area Express (FAX). FAX operates three transit routes in the study area: 9, 26, and 45. A description and map of these routes is provided in the discussion below.

ROUTE 9



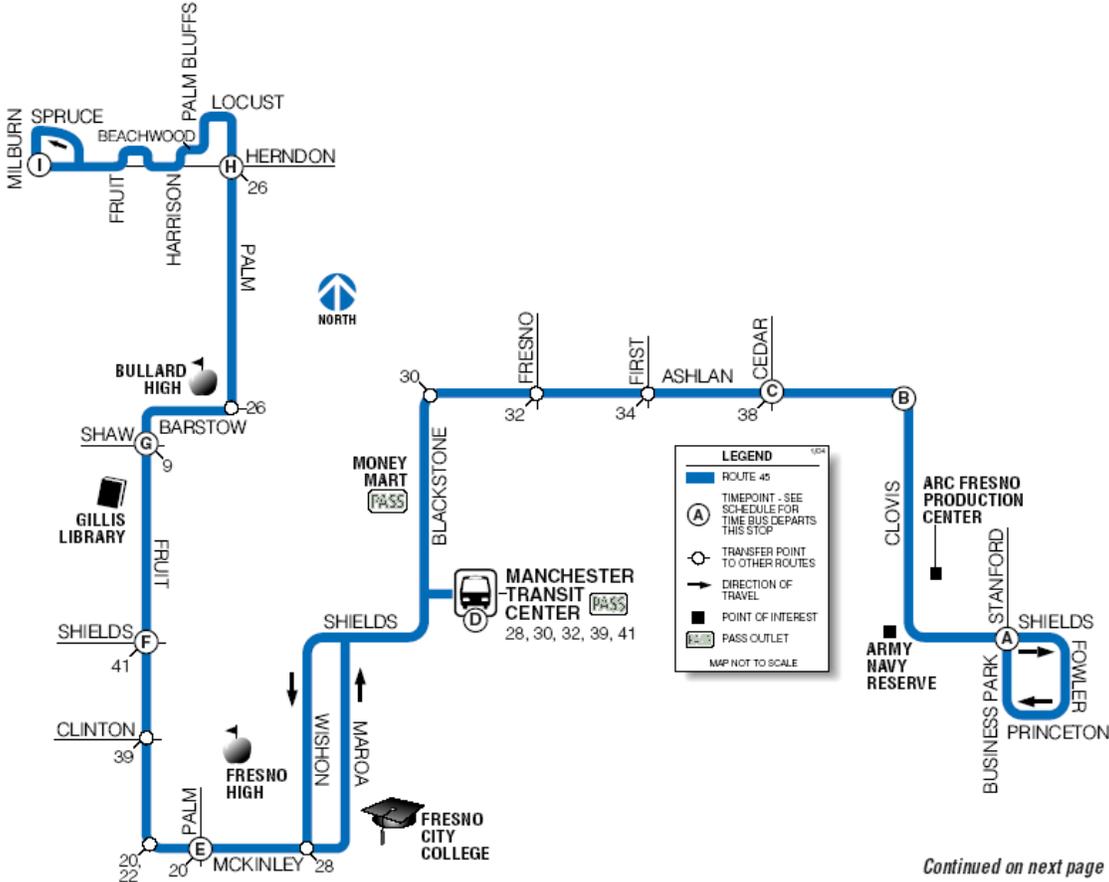
Route 9, Shaw Avenue Crosstown, operates along Shaw Avenue in the study area with stops near the intersections of Shaw and Palm Avenues, and Shaw and Fruit Avenues. The route runs from approximately 5:40 AM to 10:30 PM weekdays and from approximately 6:45 AM to 7:30 PM weekends with 30 minute headways.

ROUTE 26



Route 26, North Palm/Peach Avenue operates along Palm Avenue in the study area with a stop near the intersection of Palm and Shaw Avenues, and Palm and Barstow Avenues. The route runs from approximately 6:00 AM to 10:30 PM weekdays and from approximately 7:15 AM to 7:30 PM weekends with 30 minute headways.

ROUTE 45



Continued on next page

Route 45, Ashlan Crosstown, operates along Fruit Avenue and Palm Avenue with stops near the intersections of Fruit and Shaw Avenues, and Barstow and Palm Avenues. The route runs from approximately 6:00 AM to 9:15 PM weekdays and from approximately 9:30 AM to 6:30 PM weekends with one hour headways.

Railroad

There is an existing at-grade railroad crossing at Palm Avenue, just north of Dakota Avenue. This railroad crossing is currently controlled by automatic gate arms and flashing lights facing both directions of Palm Avenue. The crossing currently operates signal preemption with the nearby traffic signal at Dakota Avenue. During train crossing phases, all directions of the Dakota traffic signal receive flashing red indications. Pedestrian facilities at the crossing are located on the west side of Palm Avenue. The asphalt paving on the sidewalk-area of the at-grade crossing has deteriorated and has large holes in the pedestrian area. According to the California Public Utilities Commission, the Palm Avenue crossing is frequented by BNSF freight and Amtrak trains totaling approximately 37 trains per day. A typical freight train crossing was observed during the AM peak hour. Queue lengths of four vehicles per lane were observed for the southbound approach. The northbound approach developed queues filling the available storage between the crossing arms and the traffic signal at Dakota Avenue, which accommodated approximately two vehicles per lane. Queues also developed at the northbound (approximately six vehicles per lane) and eastbound (two vehicles per lane) approaches to the traffic signal. After clearance of the train and raising of the gate arms, the traffic signal resumes operation, clearing the northbound and southbound directions. All vehicle queues were observed to clear within one cycle length. Pedestrian and bicycle traffic in the area was observed to be minimal during the field observations (approximately 8AM – 9AM on a Wednesday). No pedestrians were observed attempting to cross the tracks on the east side of Palm Avenue. One cyclist was observed dismounting and walking his bicycle across the pedestrian crossing area on the west side of Palm Avenue.²

Existing Traffic Conditions

The traffic impact study analyzed the study roadway segments and intersections for existing levels of service. The existing lane configurations and traffic volumes under existing conditions are presented in Figure 4.12-2. Tables 4.12-2A and 4.12-2B show the existing levels of service for the segments and intersections, respectively. The signalized intersection levels of service are representative of the whole intersection, although individual intersection movements or approaches may operate above or below the signalized LOS. As shown in these tables, all the study segments and intersections are currently operating the appropriate adopted LOS standard under existing conditions.

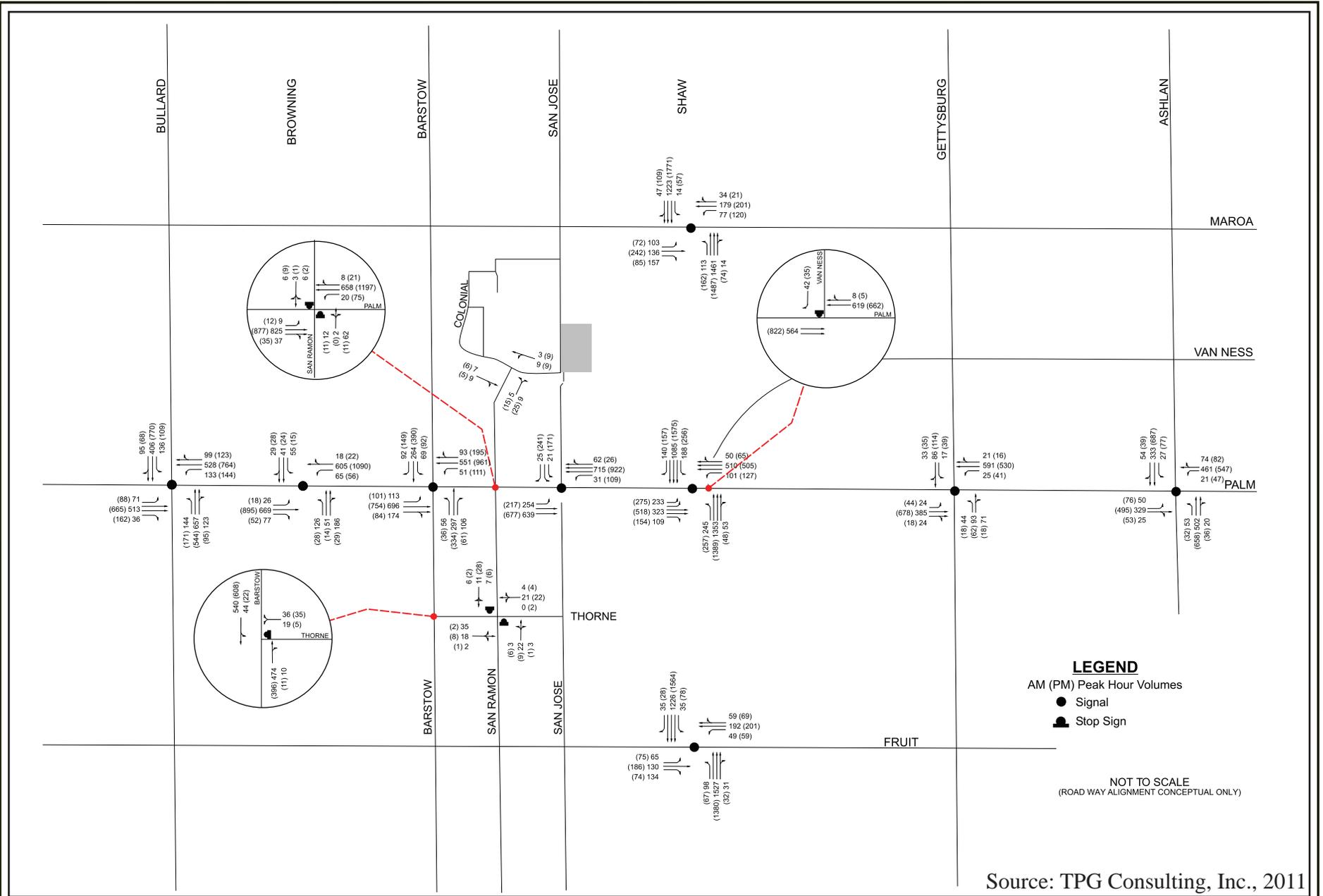
Peak hour traffic signal warrants were prepared for the unsignalized study intersections (Warrant 3, part b). The warrant was not projected to be met at any of the unsignalized intersections under existing conditions.

Accident History

The traffic impact study included a review of the most recent (2007-2009) traffic accidents for the study intersections. Accident data was provided by the City of Fresno and Fresno County for the intersections within their jurisdictions. The actual accident rates were computed based on the accident data provided and the traffic counts taken for this report. The actual accident rates were then compared to basic average accident rates developed by Caltrans for state facilities.³ Table 4.12-3 shows the results of this comparison.

² Funding is available for safety improvements at the Palm/Dakota railroad crossing through the Section 130 Railroad Crossing Safety Upgrade Program administered by Caltrans.

³ *Caltrans 2001 Accident Data on California State Highways*, Basic Average Accident Rate Table for Intersections, 8/15/00



Existing Peak Hour Traffic Volumes

Figure 4.12-2

**Table 4.12-2A
Weekday Level of Service Summary for Roadway Segments**

ROAD SEGMENTS	LOS Standard	Existing	Existing Plus Project	Existing Plus Approved Projects Plus Project ¹	2030 No Project	2030 With Project
		LOS AM/PM	LOS AM/PM	LOS PM	LOS AM/PM	LOS AM/PM
Shaw Avenue – Palm Avenue to Fruit Avenue	F	C/C	C/C	C	C/D	C/D
Shaw Avenue – Maroa Avenue to Palm Avenue	F	C/C	C/C	C	C/D	C/D
Palm Avenue – Bullard Avenue to Barstow Avenue	D	C/C	C/C	C	C/D	C/D
Palm Avenue – Barstow Avenue to San Ramon Avenue	D	C/C	C/C	D	C/D	C/D
Palm Avenue – San Ramon Avenue to San Jose Avenue	D	C/C	C/C	D	C/D	C/D
Palm Avenue – San Jose Avenue to Shaw Avenue	D	C/C	C/C	C	C/D	C/D
Palm Avenue – Shaw Avenue to Gettysburg	D	C/C	C/C	C	C/C	C/C
San Jose Avenue – Colonial Avenue to Maroa Avenue	D	C/C	C/C	C	C/C	C/C
San Ramon Avenue – Palm Avenue to Fruit Avenue	D	C/C	C/C	C	C/C	C/C
Barstow Avenue – Palm Avenue to Fruit Avenue	D	C/D	C/D	D	D/F	D/F
Thorne Avenue – Barstow Avenue to San Ramon Avenue	D	C/C	C/C	C	C/C	C/C

¹ No AM peak hour Approved Project traffic so only PM peak hour analyzed
Bold indicates significant impact

Table 4.12-2B Weekday Levels of Service Summary for Intersections											
INTERSECTIONS	LOS Standard	Existing		Existing Plus Project		Existing Plus Approved Projects Plus Project ¹		2030 No Project		2030 With Project	
		LOS AM/PM	Delay ² AM/PM	LOS AM/PM	Delay ² PM	LOS PM	Delay ² PM	LOS AM/PM	Delay ² AM/PM	LOS AM/PM	Delay ² AM/PM
Bullard Avenue at Palm Avenue	D	C/D	34.2/38.8	D/D	35.4/39.6	D	51.1	D/F	49.0/100.3	D/F	51.3/102.8
Browning Avenue at Palm Avenue	D	B/A	14.6/8.7	B/B	14.8/8.8	B	14.3	B/C	16.6/22.8	B/C	16.9/23.0
Barstow Avenue at Palm Avenue	D	C/C	20.6/29.9	C/C	21.1/31.2	D	54.1	C/F	33.3/81.1	C/F	34.8/84.5
San Ramon Avenue at Palm Avenue	D										
• NB Left	D	B/B	10.7/10.0	B/A	11.1/9.9	B	10.5	A/B	9.6/11.9	A/B	9.8/12.1
• SB Left	D	A/B	9.4/10.9	A/B	9.4/11.3	B	12.4	A/B	9.1/14.0	A/B	9.1/14.7
• EB Approach	D	B/B	13.6/14.9	B/B	13.6/14.4	B	13.1	B/C	11.7/15.9	B/C	11.7/16.4
• WB Approach	D	C/B	20.0/15.0	C/B	19.2/15.0	B	14.5	C/C	15.1/17.1	B/C	14.5/18.1
San Jose Avenue at Palm Avenue	D	A/B	10.0/15.9	B/B	12.5/18.0	B	19.5	A/B	9.1/16.1	B/B	10.6/17.9
Shaw Avenue at Palm Avenue	D	D/D	37.2/39.2	D/D	38.3/42.1	D	49.2	C/C	29.7/32.9	C/C	27.4/35.0
Van Ness Avenue at Palm Avenue	D										
• WB Right	D	B/B	11.8/11.1	B/B	12.0/11.2	B	11.4	B/B	10.8/10.9	B/B	11.0/11.0
Gettysburg Avenue at Palm Avenue	D	A/A	7.1/6.4	A/A	7.1/6.3	A	6.3	B/A	10.3/9.9	B/B	10.3/10.1
Ashlan Avenue at Palm Avenue	D	B/B	14.6/19.1	B/B	15.0/19.4	C	20.9	B/C	16.8/28.9	B/C	16.8/29.2
Barstow Avenue at Thorne Avenue	D							C/C	26.8/24.3	C/C	26.9/23.9
• WB Left	D	A/A	9.3/8.5	A/A	9.3/8.5	A	9.0				
• NB Approach	D	D/B	33.6/14.2	D/B	34.6/14.4	C	18.6				
San Ramon Avenue	D										

Table 4.12-2B											
Weekday Levels of Service Summary for Intersections											
INTERSECTIONS	LOS Standard	Existing		Existing Plus Project		Existing Plus Approved Projects Plus Project¹		2030 No Project		2030 With Project	
		LOS AM/PM	Delay² AM/PM	LOS AM/PM	Delay² PM	LOS PM	Delay² PM	LOS AM/PM	Delay² AM/PM	LOS AM/PM	Delay² AM/PM
at Thorne Avenue											
• EB Approach	D	B/A	10.9/9.8	B/A	10.9/9.8	B	10.1	B/A	10.3/9.6	B/B	10.3/9.6
• WB Approach	D	B/A	10.5/9.8	B/A	10.5/9.8	A	10.0	A/A	10.0/9.7	A/B	10.0/9.7
• NB Approach	D	A/A	0.0/0.5	A/A	0.0/0.5	A	0.5	A/A	0.0/0.4	A/A	0.0/0.4
• SB Approach	D	A/A	4.9/1.4	A/A	4.9/1.4	A	2.0	A/A	4.8/1.9	A/A	4.8/1.9
Shaw Avenue at Fruit Avenue	F	B/B	13.6/14.4	B/B	13.6/14.8	B	14.9	B/B	15.8/17.5	B/B	14.7/17.2
Shaw Avenue at Maroa Avenue	F	B/B	13.3/19.5	B/B	13.4/19.6	C	22.0	B/E	19.4/75.1	B/E	17.2/72.2
San Ramon Avenue at Colonial Avenue	D										
• NB Left-Through	D	A/A	5.5/3.7	A/A	5.6/3.7	A	3.7	A/A	5.8/3.8	A/A	5.9/3.8
• EB Approach	D	A/A	8.8/8.9	A/A	8.8/8.9	A	8.9	A/A	8.8/8.9	A/A	8.8/8.9
¹ No AM peak hour Approved Project traffic so only PM peak hour analyzed ² delay in seconds per vehicle NB = northbound SB = southbound EB = eastbound WB = westbound											

Location	Fatal Accident Rates¹ (Actual / Average)	Injury Accident Rates¹ (Actual / Average)	PDO Accident Rates¹ (Actual / Average)	Total Accident Rates¹ (Actual / Average)
Bullard Ave/Palm Ave	0.000 / 0.002	0.11 / 0.19	0.24 / 0.24	0.35 / 0.43
Browning Ave/Palm Ave	0.000 / 0.002	0.00 / 0.19	0.14 / 0.24	.014 / 0.43
Barstow Ave/Palm Ave	0.000 / 0.002	0.13 / 0.19	0.13 / 0.24	0.26 / 0.43
San Ramon Ave/Palm Ave	0.000 / 0.002	0.00 / 0.09	0.00 / 0.13	0.00 / 0.22
San Jose Ave at Palm Ave	0.000 / 0.002	0.08 / 0.19	0.04 / 0.24	0.13 / 0.43
Shaw Ave/Palm Ave	0.000 / 0.002	0.05 / 0.19	0.09 / 0.24	0.14 / 0.43
Van Ness Boulevard/Palm Ave	0.000 / 0.001	0.05 / 0.06	0.00 / 0.08	0.05 / 0.14
Gettysburg Ave/Palm Ave	0.000 / 0.002	0.07 / 0.19	0.07 / 0.24	0.13 / 0.43
Ashlan Ave/Palm Ave	0.000 / 0.002	0.36 / 0.19	0.53 / 0.24	0.89 / 0.43
Barstow Ave/Thorne Ave	0.000 / 0.001	0.00 / 0.06	0.25 / 0.08	0.25 / 0.14
San Ramon Ave/Thorne Ave	0.000 / 0.002	0.00 / 0.09	0.00 / 0.13	0.00 / 0.22
Shaw Ave/Fruit Ave	0.000 / 0.002	0.14 / 0.19	0.08 / 0.24	0.21 / 0.43
Shaw Ave/Maroa Ave	0.000 / 0.002	0.19 / 0.19	0.14 / 0.24	0.33 / 0.43
San Ramon Ave/Colonial Ave	0.000 / 0.001	0.00 / 0.04	0.00 / 0.06	0.00 / 0.10
¹ Accident rates for intersections are accidents per million vehicles entering the intersection. PDO = property damage only Accident rates above the average rates are shown in bold .				

Intersections with actual accident rates above the average rates are shown in Table 4.12-3. As seen in this table, the Ashlan Avenue/Palm Avenue and Barstow Avenue/Thorne Avenue intersections are operating above the basic average accident rate. No fatal accidents occurred at any of the study intersections during the analyzed time periods.

Regulatory Environment

California Senate Bill (SB) 375. California planning objectives include fostering reduction in greenhouse gas emissions by reducing what has been characterized as sprawl growth. This program is set forth in a new State law, SB 375, also known as the Sustainable Communities and Climate Protection Act of 2008. This program includes an emphasis on efficient land use connected to regional transportation planning, which is often best supported by higher density development including the densities recommended in the Valleywide Blueprint Planning Process, described below. Refer to **Section 4.3 Air Quality & Greenhouse Gas** of this EIR for additional discussion of SB 375, SB 32, and other recent state legislation that supports regional planning practices to reduce vehicular travel and the emission of air pollutants including greenhouse gases. (Refer also to Staff Report prepared for the California Air Resources Board on Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant to Senate Bill 375, presented September 23, 2010).

California Assembly Bill (AB) 1358. AB 1358, the Complete Streets Act, went into effect January 2011. The bill requires that all cities and counties, when updating their general plans, ensure that local streets and roads meet the needs of all users, including bicyclists, pedestrians transit riders, and motorists.

2025 City of Fresno General Plan. A detailed analysis of the project’s consistency with applicable General Plan policies is provided in Table 4.9-3 in Section 4.9 Land Use and Planning of this EIR.

According to the City of Fresno’s Traffic Impact Study Guidelines, “all City intersections and roadway segments shall operate at a LOS D or better under the near-term conditions, unless a finding of overriding consideration was adopted in the General Plan Master EIR. Under long-term conditions (Year 2025 Conditions) all City intersections and roadway segments shall operate at a LOS D or better, except for the roadway segments adopted in the Master General Plan EIR to operate at LOS E or F.”

The City’s General Plan MEIR identifies several roadway segments that are forecast to operate below the LOS D standard, and made a finding of overriding considerations for those segments, since improvements were determined to be infeasible in the MEIR. In the project area, there are four roadway segments identified in the MEIR, as follows:

- Bullard Avenue – Marks to Fresno – LOS F
- Barstow Avenue – Palm to Blackstone – LOS F
- Shaw Avenue – Brawley to SR 168 – LOS F
- Ashlan Avenue – Fruit to Maple – LOS F

Fresno County General Plan. According to the Fresno County General Plan Circulation Element, “the County shall plan and design its roadway system in a manner that strives to meet level of service (LOS) D on urban roadways within the spheres of influence of the cities of Fresno and Clovis and LOS C on all other roadways in the County.” However, the County’s General Plan EIR identifies some locations where improvements to allow for an LOS D are not feasible. In the project area, Ashlan Avenue, east and west of Palm Avenue, currently operates and is projected to operate at LOS F in the future. No improvements, such as widening to four lanes, are considered feasible for this segment of Ashlan Avenue. As such, the County has adopted an overriding consideration for this segment.

Council of Fresno Governments, San Joaquin Valley Blueprint. The San Joaquin Valley Blueprint planning process is a joint effort of the Council of Fresno Governments and eight other local agencies in order to develop a cohesive regional framework for future growth within the Central Valley. Relevant goals of the Blueprint Plan as incorporated in the Regional Transportation Plan include developing and maintaining a multimodal transportation system and preserving and enhancing Valley transportation corridors. The Blueprint Plan’s primary recommendation is the adoption of a future growth scenario identified as Scenario B+ , and 12 Smart Growth Principles as the Preferred Blueprint Growth Scenario for the San Joaquin Valley to the year 2050. Scenario B+ includes substantial increased density of development in the City of Fresno (average of 9 units per acre, for all new growth within the Fresno Clovis Metropolitan area between April 2009 and 2050). The adopted 12 Smart Growth Principles are 1) create a range of housing opportunities and choices; 2) create walkable neighborhoods; 3) encourage community and stakeholder collaboration; 4) foster distinctive, attractive communities with a strong sense of place; 5) make development decisions predictable, fair, and cost-effective; 6) mix land uses; 7) preserve open space, farmland, natural beauty, and critical environmental areas; 8) provide a variety of transportation choices; 9) strengthen and direct development towards existing

communities; 10) take advantage of compact building design; 11) enhance the economic vitality of the region; and 12) support actions that encourage environmental resource management. The Scenario B+ and the 12 Smart Growth Principles are intended to serve as guidance for the Valley's local jurisdictions with land use authority as they update their general plans. The San Joaquin Valley Blueprint identifies upcoming tasks as including the integration of the Valley Blueprint into local city and county general plans within the Valley, for the purpose of resulting in a healthier, more vibrant economy, an improved transportation system through reduced congestion and viable transit options, improved air quality, and accommodation of the housing infrastructure needs of the Valley's growing population. (Refer also to San Joaquin Valley BLUEPRINT, Fresno County Progress Report, Council of Fresno County Governments, 2009.)

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment);
- result in inadequate emergency access; or
- conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

City of Fresno. The traffic impacts of the project were evaluated according to the City of Fresno Traffic Impact Study Guidelines, which states⁴:

“For study intersections, the impact is considered significant if the addition of the traffic generated from the proposed project results in any one of the following:

1. *Triggers an intersection operating at acceptable LOS to operate at unacceptable levels of service*
2. *Triggers an intersection operating at unacceptable LOS (LOS E) to operate at LOS F*
3. *Increases the average delay for a study intersection that is already operating at unacceptable LOS”*

⁴ City of Fresno Traffic Impact Study Guidelines, City of Fresno, February 2009, Page 10.

After each study intersection was evaluated against the LOS policy, those locations found to be deficient were compared to the above policies to determine the level of significance of potential impacts.

For study segments with an adopted LOS F standard, the significance criteria for project-related impacts are identified in the General Plan MEIR as follows:

“Development projects that are consistent with plans and policies but that could affect conditions on major street segments predicted by the General Plan EIR traffic analysis to perform at an ADT LOS “F” shall not cause further substantial degradation of conditions on those segments before 2025 without completing a traffic and transportation evaluation. This evaluation will be used to determine appropriate project-specific design measures or street/transportation improvements that will contribute to achieving and maintaining a LOS equivalent to that anticipated in the General Plan. Further substantial degradation is defined as an increase in the peak hour vehicle/capacity (v/c) ratio of 0.15 or greater for roadway segments whose v/c ratio is estimated to be 1.00 or higher in 2025 by the General Plan EIR.”⁵

The v/c increase (0.15) criteria was applied to determine what, if any, significant project-related impacts occur for all study locations with Master EIR adopted LOS F standards that are projected to operate at LOS F.

The traffic study finds that many of the intersections along the impacted roadway network will operate below the LOS D standard without the project. This represents an existing significant cumulative impact under the existing General Plan. Therefore, in evaluating the impacts of the project upon intersections located along the impacted segments, this EIR takes the approach that the incremental effects of the project are cumulatively considerable only if one of two criteria are met by the project, as follows:

1. Triggers an intersection operating at unacceptable LOS (LOS E) to operate at LOS F, or
2. Increases the average delay by *five or more seconds* for a study intersection that is already operating at unacceptable LOS.⁶

The change to the second criteria from the City of Fresno’s published *Traffic Impact Study Guidelines* to include the addition of the five second criteria is consistent with the standards adopted by the City in its certification of the Fresno El Paseo Environmental Impact Report (SCH #2008011003). This criteria was also used in the recently published EIR for the Fresno Southeast Walmart Expansion Project (SCH #2007091064)⁷. This criteria, although not included in the City of Fresno’s TIS Guidelines or the General Plan MEIR, is commonplace in many jurisdictions including the cities of Bakersfield and Folsom and the County of Sonoma.

⁵ *Draft Master Environmental Impact Report for the 2025 General Plan*, City of Fresno, May 2002, Page V-B17

⁶ *Recirculated Draft Fresno El Paseo Environmental Impact Report*, City of Fresno, August 2010, page 5.13-14.

⁷ *Fresno Southeast Walmart Expansion Project*, City of Fresno, December 2010, page 157.

County of Fresno. The Fresno County General Plan Circulation Element calls for the design its roadway system that strives to meet LOS D on urban roadways within the spheres of influence of the cities of Fresno and Clovis and LOS C on all other roadways in the County. However, the County’s General Plan EIR acknowledges that Ashlan Avenue, east and west of Palm Avenue, currently operates and is projected to operate at LOS F in the future and no mitigation is feasible at this location. As such, the County adopted an overriding consideration for this segment.

Based on the above, the intersection of Ashlan Avenue at Palm Avenue will be evaluated against the City’s adopted LOS standard (LOS D); all other County roadways in the project study area will be evaluated against the County’s LOS D standard.

Impacts and Mitigation

Project Trip Generation, Assignment, and Distribution

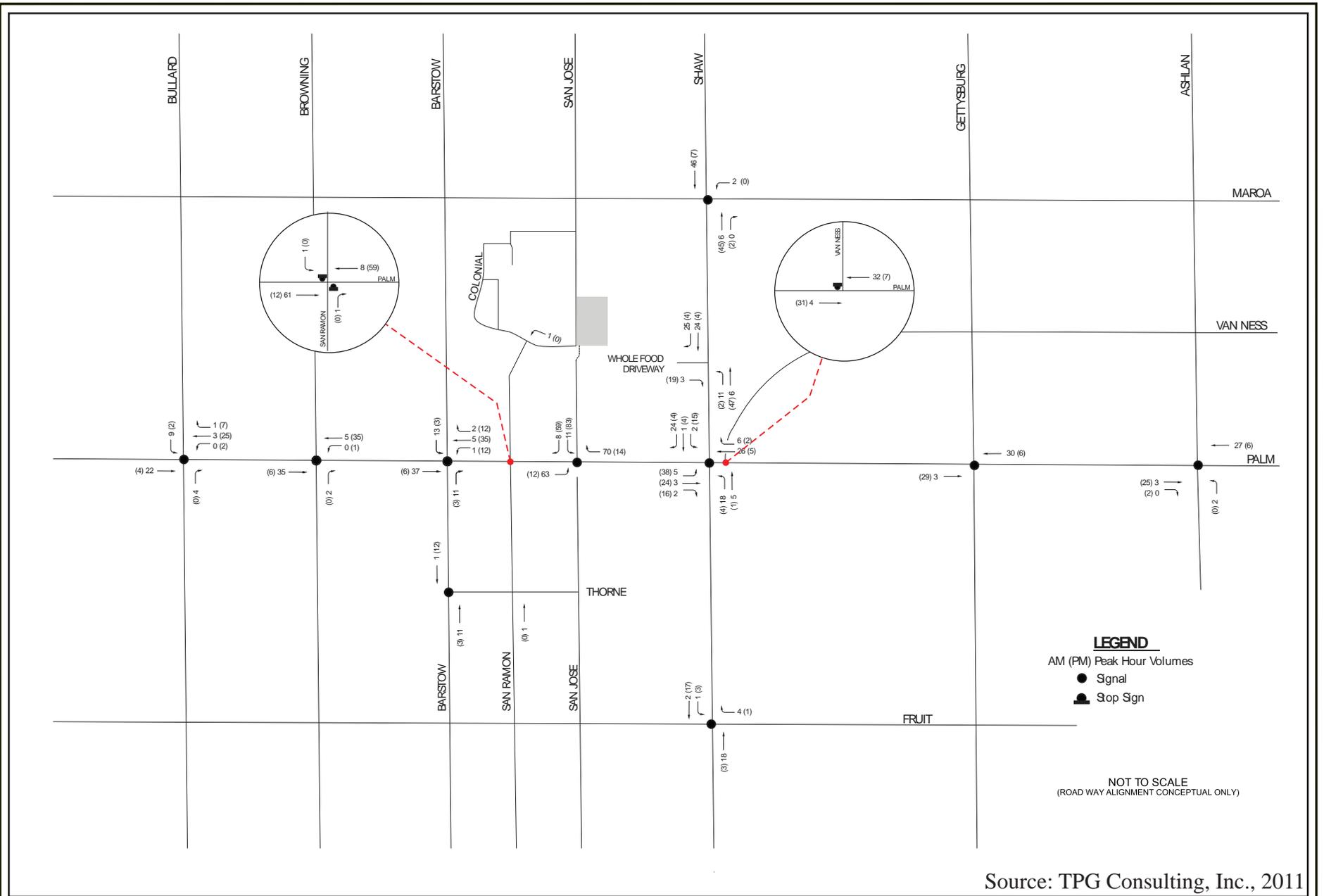
Project trip generation was developed using the *Trip Generation* manual (8th Edition, Institute of Transportation Engineers, 2008) for “General Office Building.” Table 4.12-4 presents the daily, AM, and PM peak for the street average rates and the directional distribution that were used for the traffic analysis.

Table 4.12-4 ITE Trip Generation Data – Average Rate & Directional Distribution Data				
Land Use	Period	Equation	Directional Distribution (%)	
			Enter	Exit
General Office Building	Daily	$In(T) = 0.77In(X) + 3.65$	50	50
	AM Peak of Street	$In(T) = 0.8In(X) + 1.55$	88	12
	PM Peak of Street	$T = 1.12In(X) + 78.81$	17	83
T = no. of trips X = 1,000 s.f. of gross leasable area				

The projected number of daily, AM, and PM peak hour trips generated by the project based on the equations and distributional data shown in Table 4.12-4 above are presented in Table 4.12-5.

Table 4.12-5 Project Trip Generation							
Land Use	Daily	AM			PM		
		Enter	Exit	Total	Enter	Exit	Total
General Office Building	1,381	171	23	194	33	163	196

Trip distribution for the Financial Center Phase IV project trips was based on model-generated trip distribution data. Basically the model determines the locations that the occupants of the office building are likely to travel (both to and from the site). The model then estimates the roadways that these residents would likely use to travel to/from the site and calculates the number of model generated vehicle trips projected to occur on each roadway. This trip data is converted to match the trip generation data developed for the project. Per Traffic Impact Analysis for Site Development, use of a Model is one of the most commonly accepted methods for estimating trip distribution. Figure 4.12-3 shows the project trip distribution percentages and segment and intersection assignments for the Existing Plus Project scenario.



Source: TPG Consulting, Inc., 2011



Existing + Project-Trip Distribution
Percentages and Trip Assignment

Figure
4.12-3

Site Access and Circulation Analysis

The vacant apartments on the project site formerly accessed the property from San Jose Avenue east of Colonial Avenue via a single driveway. Few or no vehicular trips are generated by the vacant apartment complex at this time. Vehicle trips generated by the proposed project would access the project site through the existing parking lot for the office building just west of the project site. Vehicles would access the project site only through the Fig Garden Shopping Center or via Palm Avenue. The project's parking areas would have no direct vehicular access to the City street system. In addition, the curb on San Jose Avenue along the project site's north frontage would prohibit parking by means of a red curb.

Emergency vehicle access to the project site would be available as follows: 1) through the Fig Garden Shopping Center, 2) from Palm Avenue via the Financial Center, and 3) from W. Scott Avenue via a fire access gate. The fire gate will be locked, prohibiting access for non-emergency vehicles.

Typical driveway throat length and queuing analyses were not prepared since the project trips would travel through existing driveways (office building and/or Fig Garden Shopping Center) prior to reaching the City street system. The project's primary access is via the signalized intersection of San Jose Avenue at Palm Avenue; a queuing analysis was prepared for this intersection as part of the traffic study (Appendix H).

The project would not result in significant on-site circulation impacts, nor would it impact emergency access.

Transit, Pedestrian and Bicycle Analysis

Pedestrian access to the project site is provided via entrances on the north and south sides of the proposed office building. Sidewalks are available on San Jose Avenue, Colonial Avenue, and San Ramon Avenue. Pedestrian access to/from the Fig Garden Shopping and Financial Centers would be made available through the adjacent office building parking lot. Sidewalks and pedestrian amenities are also available within the shopping and financial centers. The project is not proposing direct pedestrian access from the residential neighborhoods north and east of the project site.

Bicycle access is provided in the project area by surrounding roadways. Designated bike lanes are located along Palm Avenue, north of Shaw Avenue. In addition, transit service is provided by several routes near the site.

The proposed office building is not expected to substantially increase demands in such a way that it would result in conflicts with adopted plans or policies for public transit, bicycle, or pedestrian facilities. Evaluation of existing conditions as observed by the traffic consultant indicate that existing facilities are not deficient or overtaxed, and that the relatively small increase in demand generated by the project would not decrease the performance or safety of these facilities.

The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Air Traffic

The project site is not located within an airport land use plan. The nearest airports are the Fresno Yosemite International Airport, located about five miles southeast of the site, and the Sierra Sky Park Airport, a privately-owned, public-use airport located about three miles northwest of the site. The proposed office building would not create any safety hazards to future tenants or airport operations. Since the project is outside all safety hazard and approach zones for the airports, it is not subject to specific lighting, design, or other measures related to air traffic safety. The proposed office building would not change air traffic patterns or in any way create safety risks associated with flights or airport operations. **The project would not impact air traffic.**

Traffic Hazards

The project would not introduce any features that would substantially increase traffic hazards in the area (e.g., dangerous intersections or sharp curves), nor would it introduce uses that are incompatible with existing roadway conditions (e.g., farm equipment). **The project would not result in any impacts associated with traffic hazards.**

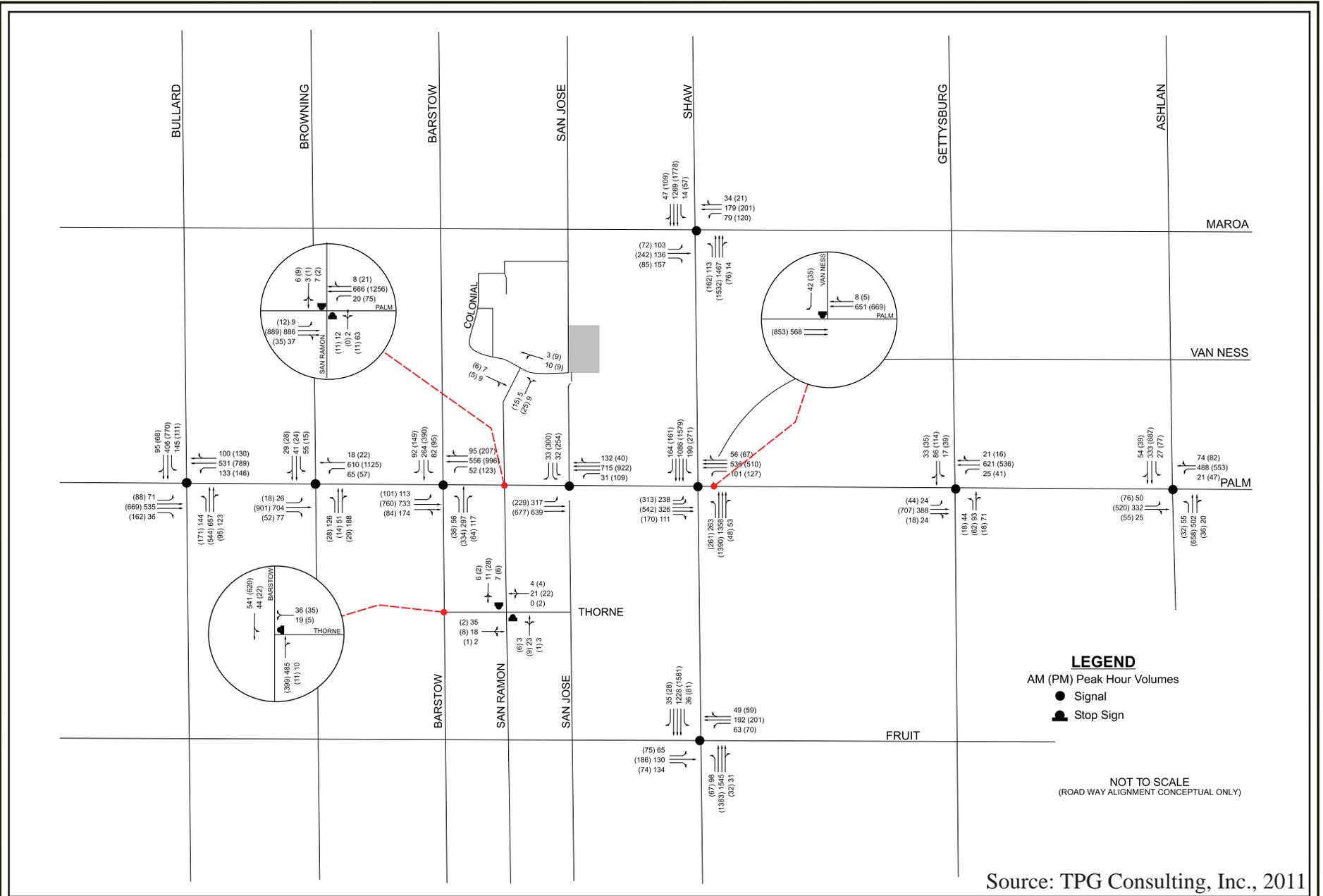
Existing Plus Project Conditions

Traffic generated by the project was combined with existing traffic to identify the traffic impacts from project implementation. The peak hour traffic volumes under Existing Plus Project conditions are presented in Figure 4.12-4. Tables 4.12-2A and B show the levels of service at the study segments and intersections under Existing Plus Project conditions. The results show that all of the study segments and intersections are projected to operate at or above the appropriate adopted level or service standard under Existing Plus Project conditions.

Peak hour traffic signal warrants were prepared for the five unsignalized intersections (Warrant 3, part b). The warrant was not projected to be met at any of the unsignalized intersections under Existing Plus Project conditions.

Existing Plus Approved Projects Plus Project Conditions

This scenario was developed using the Existing Plus Approved Projects Plus Project conditions and adding trips for the Bullard High School Improvement Project, the sole approved development in the project area. Since this approved project is only anticipated to increase PM peak hour trips, only the PM peak hour time period is analyzed under this scenario. This evaluation was based on data provided in the Traffic Impact Study for the Bullard High School Improvement Project (URS, December 2009). The trip generation and trip distribution for the Bullard High project, as reported in the URS report, are presented in Tables 4.12-6 and 4.12-7.



Source: TPG Consulting, Inc., 2011



Existing + Project Peak Hour Traffic Volumes

Figure 4.12-4

Table 4.12-6 Bullard High Event Trip Generation							
Athletic Event (3,000 spectator attendance)	Daily Trips Event Parking¹	7-9 AM Trips²			4-6 PM Trips		
		Enter	Exit	Total	Enter	Exit	Total
Offsite ³	458	n/a	n/a	n/a	229	229	458
Onsite ⁴	1,362	n/a	n/a	n/a	485	485	970
¹ Represents event and parking capacity driven roundtrips only. ² No high attendance event anticipated in the morning. ³ 50% pre-event occupancy ⁴ 30% pre-event occupancy <i>SOURCE: Traffic Impact Study for the Bullard High School Improvement Project (URS, December 2009).</i>							

Table 4.12-7 Bullard High Trip Distribution	
North of Bullard High 19%	19%
East of Bullard High	12%
East of Bullard High and SR 41	10%
South of Bullard High	28%
West of Bullard High	31%
<i>SOURCE: Traffic Impact Study for the Bullard High School Improvement Project (URS, December 2009).</i>	

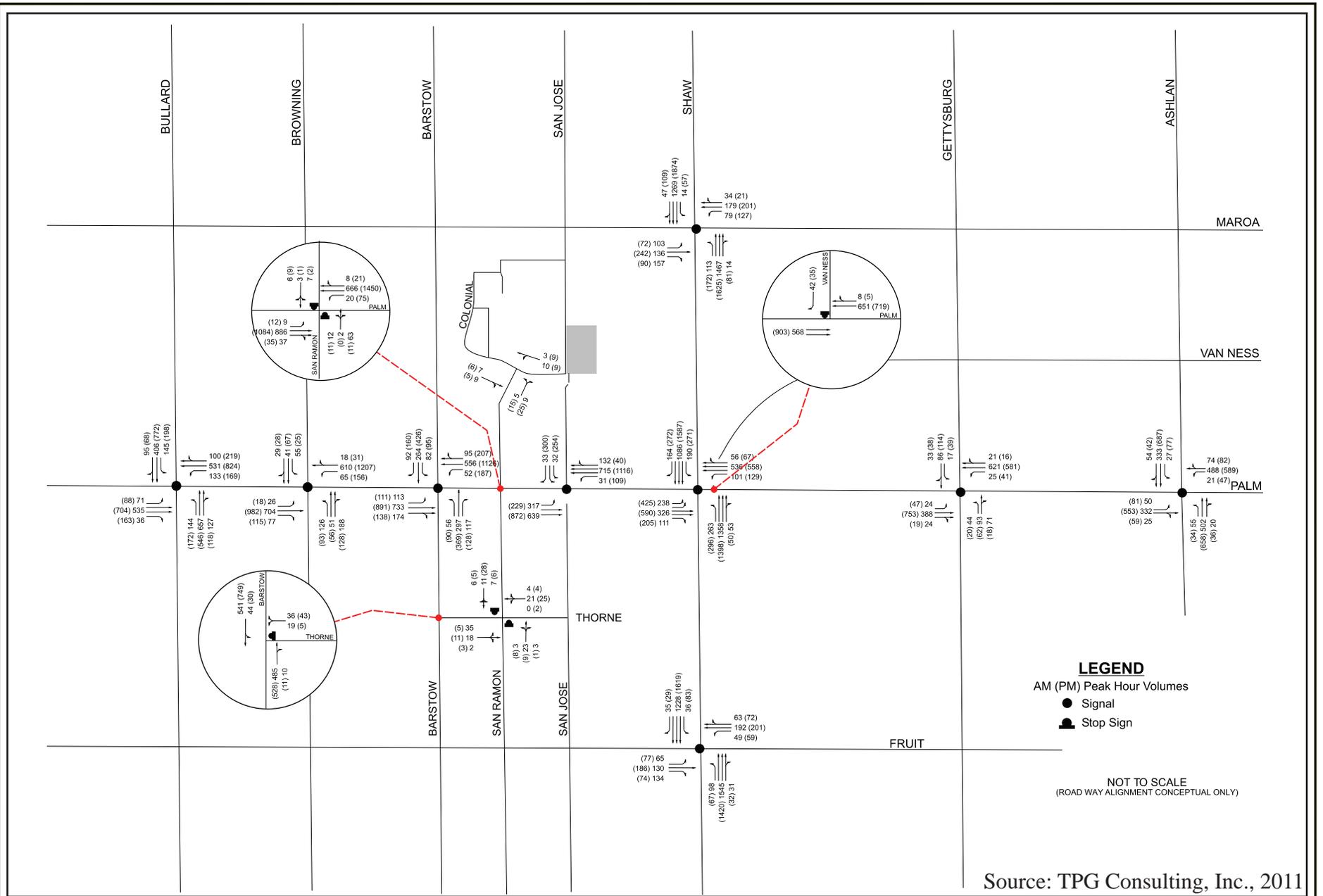
The peak hour traffic volumes for Existing Plus Approved Projects Plus Project are presented in Figure 4.12-5. Tables 4.12-2A and B show the levels of service at the study segments and intersections under Existing Plus Approved Project Plus Project conditions. The results show that all of the study segments and intersections are projected to operate at or above the appropriate adopted level or service standard under Existing Plus Approved Projects Plus Project conditions.

Based on the peak hour traffic signal warrants, the warrant is not projected to be met at any of the unsignalized intersections under Existing Plus Approved Projects Plus Project conditions.

2030 No Project Conditions

The 2030 No Project conditions scenario was prepared to address future conditions without the construction of the proposed project⁸ in order to assess baseline conditions for the 2030 Project conditions. The 2030 No Project traffic volumes were developed using existing traffic counts, the trip distribution for the Bullard High School Improvement Project, and the COFCG traffic model. The 2030 No Project scenario represents the cumulative traffic conditions without the project.

⁸ This assumes *no new development* of the site under future conditions; this is performed to provide a baseline to determine the impacts under the 2030 scenario with the addition of project traffic (i.e., the 2030 With Project scenario).



Existing + Approved Projects + Project
 Peak Hour Traffic Volumes

Figure
 4.12-5

The 2030 No Project scenario also includes all City planned projects. Based on the City of Fresno's current TSMI project list, three improvements apply to the study locations. These improvements will be constructed using TSMI funds, which the project will be required to pay into. These improvements are as follows:

- Shaw Avenue at Palm Avenue
 - Widening to dual left-turn lanes on all four legs. (Note that dual left-turn lanes are already located on the southbound approach and separate right-turn lanes are located on the westbound and southbound approaches.)

This improvement is currently ranked number 2 on the Fiscal Year 2011 (FY11) Priority List for Intersection Traffic Flow Improvements.

- Barstow Avenue at Palm Avenue
 - Installation of left-turn signals with dedicated phases

This improvement is currently ranked number 12 on the FY11 Priority List for Warranted Left Turn Signals.

- Barstow Avenue at Thorne Avenue
 - Installation a traffic signal

This improvement is currently ranked number 14 on the FY11 Priority List for New Traffic Signal Installations. This traffic signal is warranted based on the school crossing signal warrant. This traffic signal is assumed to be in place for the 2030 No Project and 2030 With Project scenarios.

In addition to the improvements planned in the TSMI, additional improvements are also planned in the City of Fresno's Intelligent Transportation Systems Program. Phase 4 of the City's ongoing traffic signal synchronization program includes synchronizing all traffic signals on Shaw Avenue from SR 99 to SR 41, and Bullard Avenue from Marks Avenue to Willow Avenue. These improvements are programmed for some time between 2011 and 2015. Therefore, the study intersections located on these corridors have been analyzed as coordinated for the 2030 No Project and 2030 With Project scenarios.

Figure 4.12-6 presents the traffic volumes for 2030 No Project conditions. Tables 4.12-2A and B show the levels of service at the study segments and intersections under 2030 No Project conditions. The results show that one segment and three intersections are projected to operate below the appropriate level of service standard under 2030 No Project conditions. The impacted segment occurs during the PM peak hour along Barstow Avenue between Palm Avenue and Fruit Avenue. The three impacted intersections are as follows:

1. Bullard Avenue at Palm Avenue – PM peak hour
2. Barstow Avenue at Palm Avenue – PM peak hour
3. Shaw Avenue at Maroa Avenue – PM peak hour

All the remaining study segments and intersections are projected to operate at or above the appropriate adopted level or service standard.

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the unsignalized intersections. None of the unsignalized intersections are projected to meet the warrant in the 2030 No Project conditions based on the warrant criteria (Warrant 3, part B).

2030 With Project Conditions

The 2030 With Project conditions scenario was developed to address future conditions with the construction of the proposed project. The 2030 With Project trip distribution assignment and percentages are shown in Figure 4.12-7. The 2030 With Project traffic volumes were developed using the 2030 No Project traffic volumes and adding traffic from the project. Study segment and intersection peak hour traffic volumes for the 2030 With Project conditions are shown in Figure 4.12-8. Tables 4.12-2A and B show the LOS at the study segments and intersections under 2030 With Project conditions. The results show that one segment and three intersections are projected to operate below the appropriate level of service standard under 2030 With Project conditions, similar to the 2030 No Project conditions. The impacted segment occurs during the PM peak hour along Barstow Avenue between Palm Avenue and Fruit Avenue. The three impacted intersections are as follows:

1. Bullard Avenue at Palm Avenue – PM peak hour
2. Barstow Avenue at Palm Avenue – PM peak hour
3. Shaw Avenue at Maroa Avenue – PM peak hour

All the remaining study segments and intersections are projected to operate at or above the appropriate adopted level or service standard for the 2030 With Project conditions.

Peak hour traffic signal warrants (Warrant 3, part B) were also prepared for the unsignalized intersections. None of the unsignalized intersections are projected to meet the warrant in the 2030 No Project conditions based on the warrant criteria (Warrant 3, part B).

Upon completion of the cumulative LOS analysis, the significance criteria were applied to determine what impacts are attributable to the project. Based on the City's significant impact threshold, none of the study locations that are projected to operate below the appropriate adopted LOS standard are significantly impacted by the project. For locations with an LOS F standard that are projected to operate at LOS F in the 2030 No Project and 2030 With Project scenarios, the overall intersection delay increase was analyzed to determine what, if any, significant project-related impacts occur. The results of this comparison are summarized below.

Intersections

Bullard Avenue at Palm Avenue – increase in average delay = $2.8 < 5$ second threshold

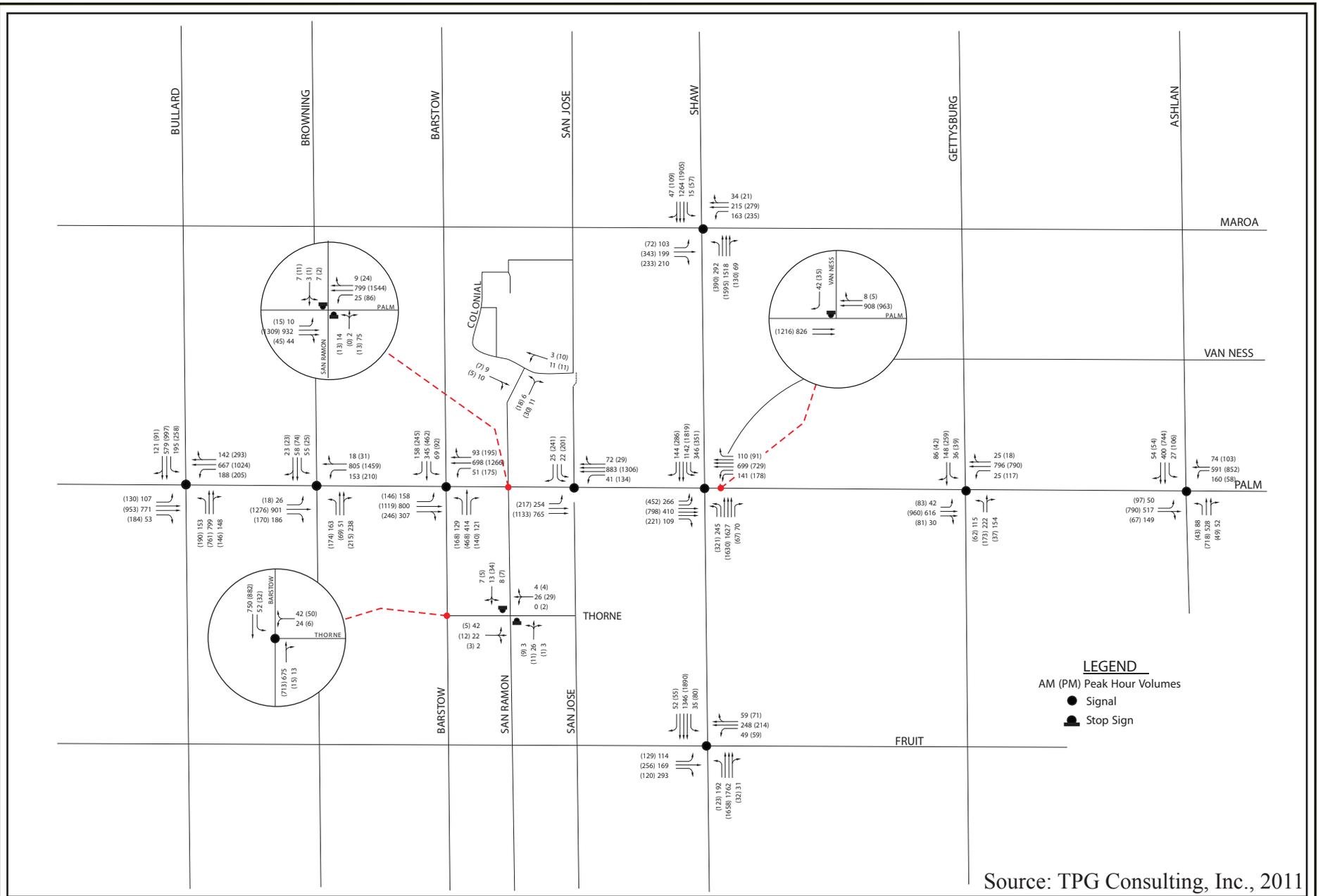
- 2030 No Project PM Delay: = 100.3
- 2030 Plus the Project: PM Delay: = 102.8

Barstow Avenue at Palm Avenue – increase in average delay = $3.4 < 5$ second threshold

- 2030 No Project: PM Delay: = 81.1
- 2030 Plus the Project: PM Delay: = 84.5

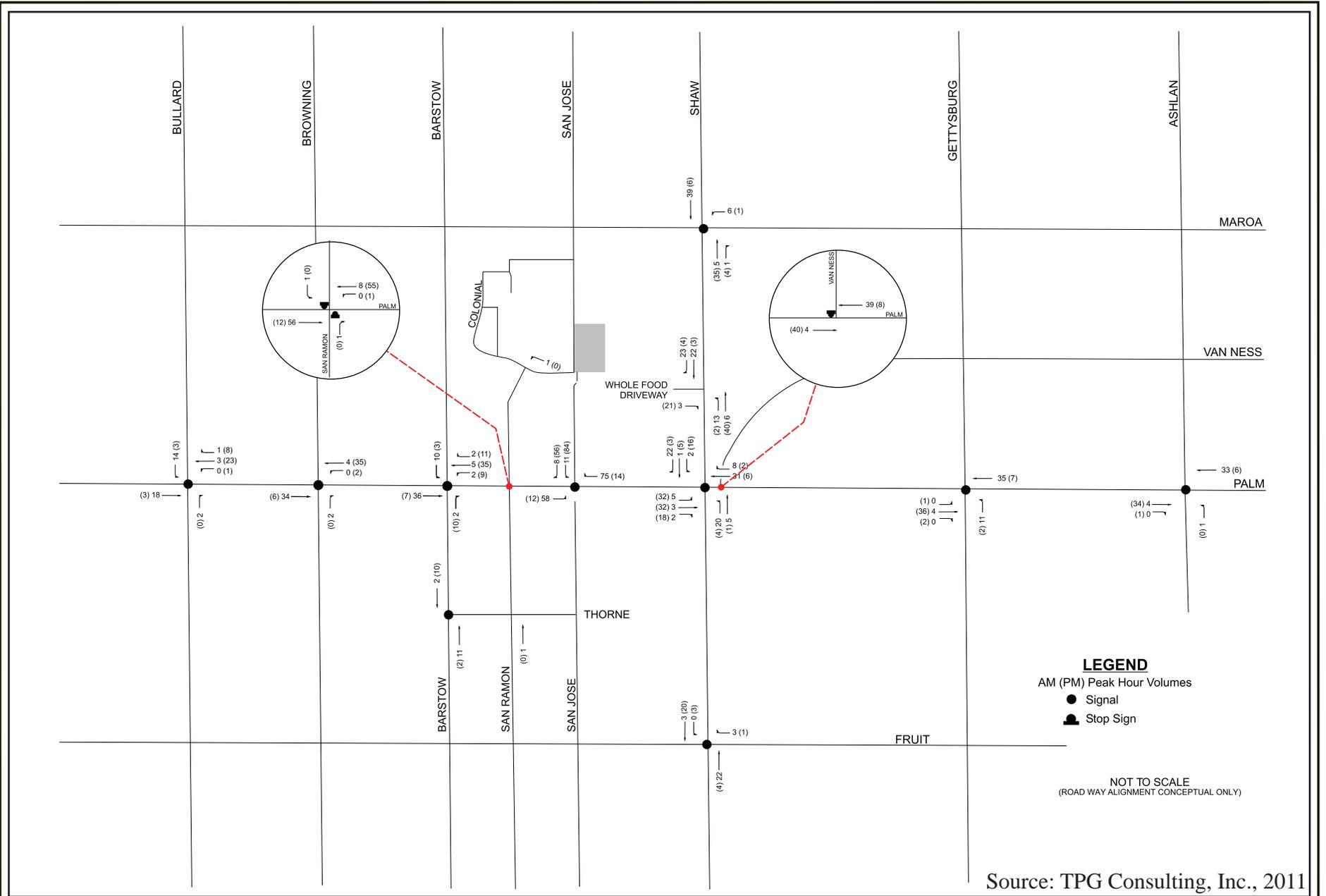
Shaw Avenue at Maroa Avenue – decrease in average delay = $2.9 < 5$ second threshold

- 2030 No Project: PM Delay = 75.1
- 2030 Plus the Project: PM Delay = 72.2



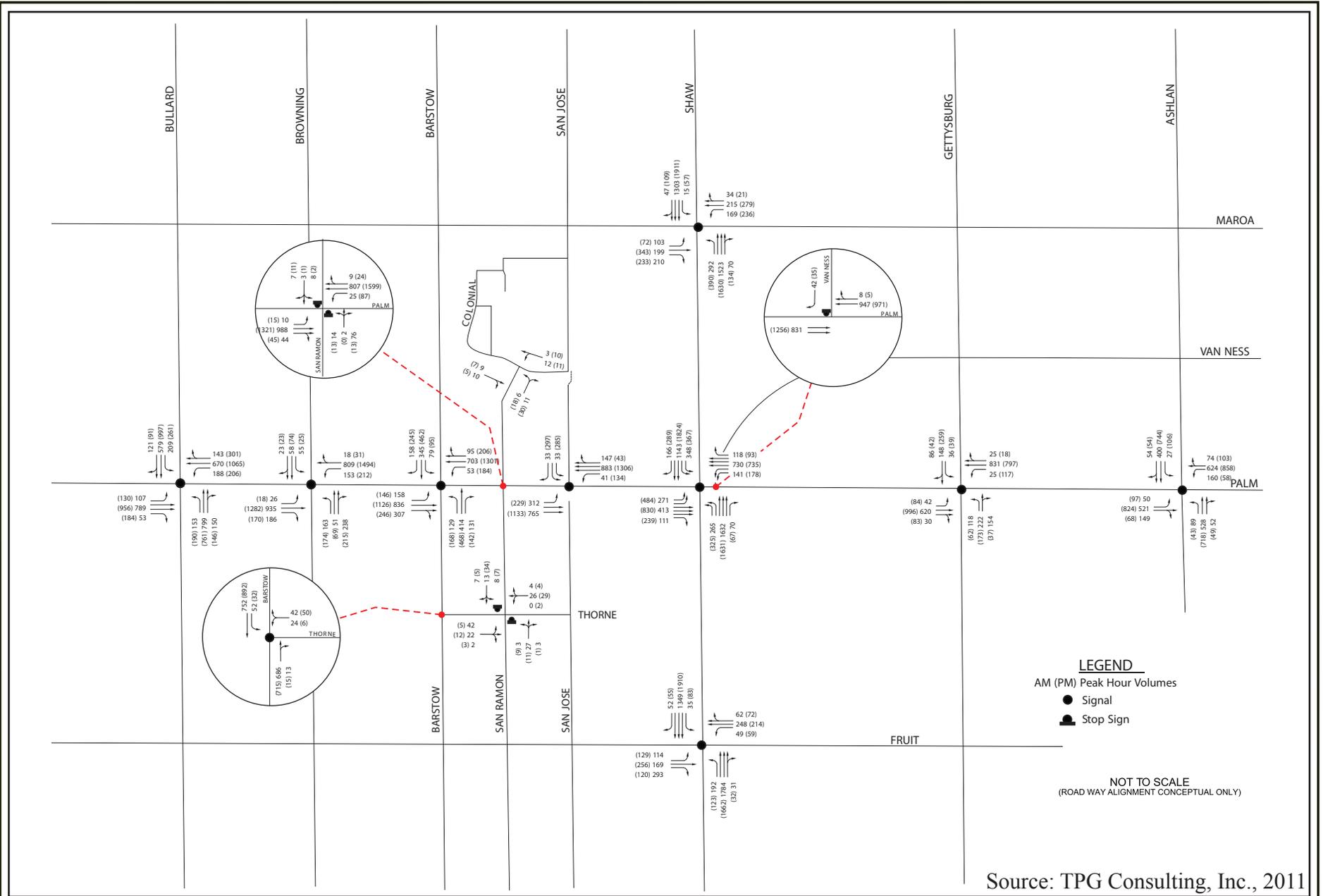
2030 No Project Peak Hour Traffic Volumes

Figure
4.12-6



2030 + Project Trip Distribution Percentages and Trip Assignment

Figure 4.12-7



2030 + Project Peak Hour Traffic Volumes

Figure
4.12-8

As indicated above, all average delay changes associated with the project would be below the five second increase threshold of significance. Therefore, the project would not result in any significant impacts. In addition, peak hour traffic signal warrants (Warrant 3, part B) were not met at any of the unsignalized study intersections.

Transportation Improvements Evaluation

Potential improvements have been identified for study locations projected to operate below the appropriate adopted LOS standard. 2025 constraints, General Plan designations, on-street parking needs, existing and planned bicycle facilities, and City practices and policies, improvements are not feasible at these locations. A summary of these improvements, including their feasibility, is provided below.

Segment of Barstow Avenue – Palm Avenue to Fruit Avenue

This segment of Barstow Avenue is currently constructed to two lanes with a continuous two-way left-turn lane. This is the buildout configuration for this roadway adopted in the General Plan. Further widening of Barstow Avenue would conflict with the adopted General Plan and *Bicycle, Pedestrian and Trails Master Plan* policies. If the segment was widened to four lanes, then the segment is projected to operate at LOS C in both the 2030 No Project and 2030 With Project scenarios. Widening of this roadway segment would require removal of the current on-street parking on both sides of Barstow Avenue. On-street parking is needed for the residential development fronting Barstow Avenue on both sides of the street. On-street parking is also needed on the north side of the roadway for the adjacent schools. Additional right-of-way cannot be feasibly obtained for widening due to the level of residential development and the adjacent school buildings.

Intersection of Bullard Avenue at Palm Avenue

All approaches to this intersection currently have separate left-turn lanes and two through lanes. Separate right-turn lanes are available on the westbound and southbound approaches. Adjacent development is located in very close proximity to the roadways on the northwest, southwest, and southeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

Intersection of Barstow Avenue at Palm Avenue

The Barstow Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right-turn lane. Palm Avenue approaches have separate left-turn lanes and two through lanes with shared right-turn lanes. See discussion above for discussion of the roadway configuration for Barstow Avenue. Adjacent development is located in very close proximity to the roadways on the southwest, southeast, and northeast corners, prohibiting widening on those approaches. In addition, the on-street parking located on Bullard Avenue is needed for the adjacent residential development and would likely need to be removed to accommodate widening at the intersection. The same would be required of the existing on-street bicycle lanes on Barstow Avenue. The intersection is already planned for installation of protected left-turn phasing, which is the most feasible improvement for the intersection. The addition of through lanes and/or right-turn lanes is not feasible.

Intersection of Shaw Avenue at Maroa Avenue

The Maroa Avenue approaches to this intersection currently have separate left-turn lanes, one through lane, and a separate right-turn lane. Shaw Avenue approaches have separate left-turn lanes and three through lanes with shared right-turn lanes. Adjacent development is located in very close proximity to the roadways on all four corners, prohibiting widening on those approaches. In addition, Maroa Avenue, south of Shaw Avenue, is constructed as a two-lane roadway with undeveloped frontages. The acquisition of additional right-of-way and removal of trees and structures would be required to extend the four-lane Maroa section to the south. The addition of right-turn lanes on Shaw Avenue or additional through lanes on Maroa Avenue are not feasible.

Freeway Analysis

LOS analyses were not performed for the closest freeways and ramp intersections (i.e., State Routes 41 and 99), due to the size and location of the project relative to the freeway facilities. The City of Fresno and Caltrans have agreed that for smaller development, not immediately adjacent to freeways, the level of analysis for Caltrans facilities within Fresno is limited to project trip traces through adjacent interchanges and calculation of the project's proportionate fair share contribution to any potential improvements; no technical analysis is required for this project (Caltrans letter dated August 25, 2009). The project trip traces through adjacent interchanges are shown in Table 4.12-8. The project will be required to pay the City of Fresno's traffic impact fees, based on the adopted fee schedule at the time the project's building permit is obtained (see additional discussion below under "Traffic Impact Fees/Mitigation." The project may also be subject to payment of the Fresno County Regional Transportation Mitigation Fee (see discussion below).

Interchange	Existing	2030
	AM/PM	AM/PM
Bullard Avenue at SR 41	3/5	11/8
Shaw Avenue at SR 41	40/38	33/32
Ashlan Avenue at SR 41	2/2	4/2
Shaw Avenue at SR 99	4/3	9/9

The project would have a less-than-significant impact on freeway facilities.

Cumulative Impacts

The traffic analysis evaluated the future cumulative traffic conditions under the 2030 With Project scenario. Under this scenario, future growth to 2030 combined with the project would not result in significant impacts.

Based on identified right-of-way constraints, 2025 General Plan designations, on-street parking needs, existing and planned bicycle facilities, and City practices and policies, improvements are not feasible at the locations impacted under the 2030 No Project scenario. Therefore, the 2030 No Project cumulative condition is considered significant and unavoidable because no feasible mitigation is available.

Traffic Impact Fees/Mitigation

Potentially recommended improvements (such as addition of through and turn lanes, changes in signal phasing, movement restriction, etc.) have been evaluated against the established criteria presented in the City of Fresno's *Traffic Impact Study Report Guidelines*, as follows:

“For all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any). All mitigations should be reviewed in the field to make sure that they can be accommodated. If they cannot be accommodated or are not feasible please advise in the TIS so that the applicant and the City of Fresno are aware of right-of-way issues in advance.”

As shown above, the project does not create any project-specific significant impacts to the analysis roadways. However, the project will be required to pay the City's Fresno Major Street Improvement (FMSI) and Traffic Signal Mitigation Impact (TSMI) fees to mitigate its contribution to the cumulative impacts. The project may also be required to pay the Fresno County Regional Transportation Mitigation Fee (RTMF).⁹ The payment of traffic impact fees is an accepted form of mitigation for traffic impacts under CEQA. The payment of the City and County traffic impact fees will reduce the project's incremental contribution to cumulative traffic impacts to a less-than-significant level.

The project would result in less-than-significant cumulative traffic impacts.

⁹ This fee program is currently suspended, but may be reactivated at the time the project is implemented, thus it is a relevant mitigation requirement for this analysis.

4.13 UTILITIES AND SERVICE SYSTEMS

Introduction

The Utilities and Service Systems section evaluates the impacts of the proposed project on water supply and distribution facilities, wastewater collection, treatment, and disposal facilities, and natural gas/electricity supply and infrastructure. Impacts related to water quality and storm water infrastructure are addressed in Section **4.8 Hydrology and Water Quality** of this EIR.

DD&A contacted the City of Fresno Department of Public Utilities to obtain information related to sanitary sewer, wastewater management, water, and solid waste. DD&A also contacted the County of Fresno Department of Public Works and Planning concerning solid waste. Information regarding anticipated energy demand was obtained from the Air Quality and Greenhouse Gas Analysis prepared by Donald Ballanti (see Appendix B), in addition to information from the U.S. Energy Information Administration. The analysis related to water supply and availability is based on the 2008 Urban Water Management Plan (UWMP), consultation with the City of Fresno, and the Utility and Infrastructure Report & Public Improvements (November 2011) prepared by Lars Andersen & Associates, Inc. A copy of that report is included in Appendix I. The UWMP demand factors and water use assumptions were utilized to generate anticipated demand factors associated with the proposed project.

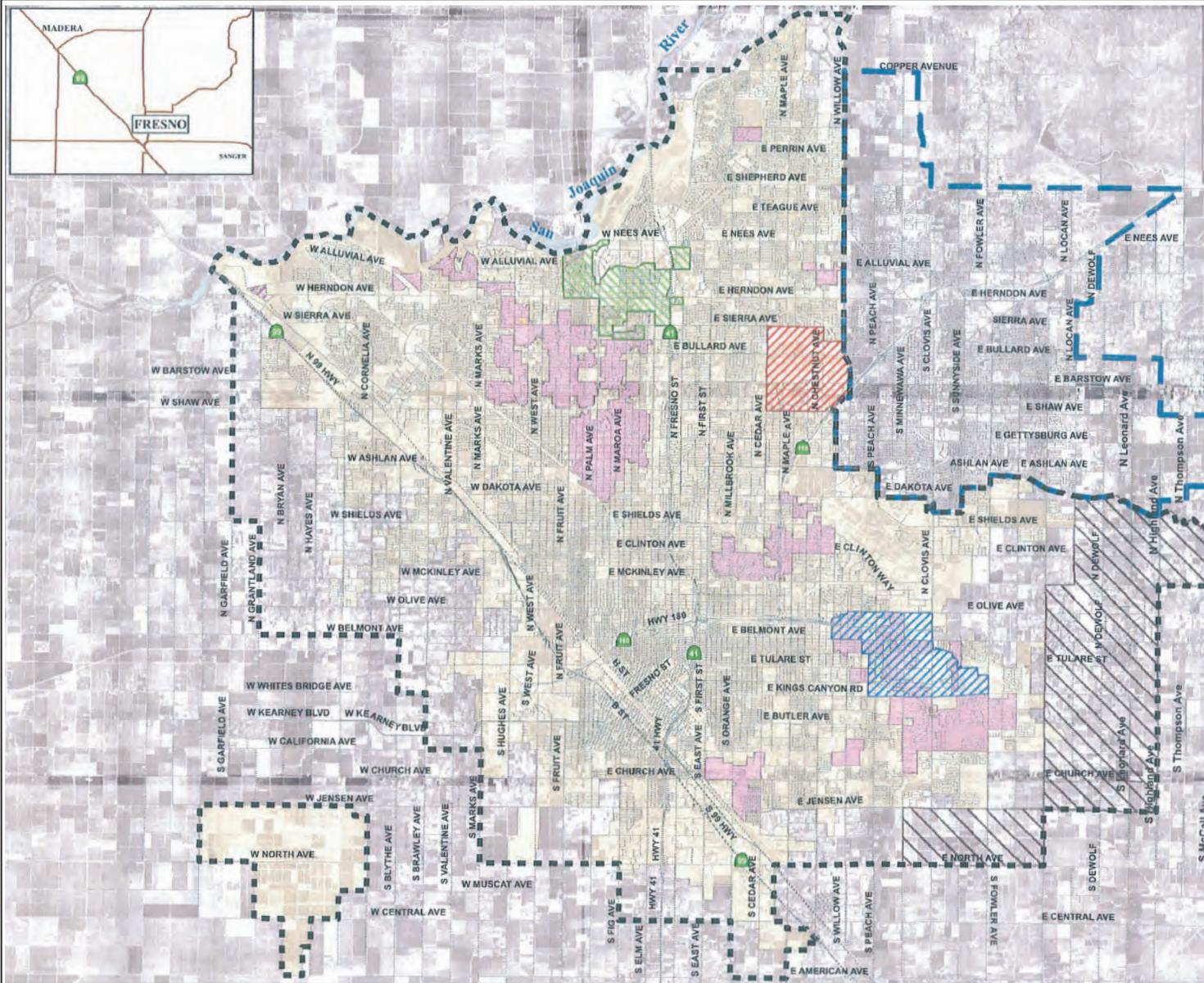
Setting

Water Supply

The City of Fresno is responsible for providing potable water services to an estimated 503,000 residents within the City of Fresno Water Division service area, which encompasses 110 square miles (refer to Figure 4.13-1). The City's existing water system consists of approximately 1,740 miles of transmission and distribution pipelines, 250 operational groundwater wells, a 30 million gallons per day (mgd) surface water treatment facility, storage facilities, and booster pump facilities. The distribution system is divided into four quasi-pressure zones to help regulate minimum and maximum system pressures in the various topographic areas of the City. For more information regarding the City's existing water system, please refer to the City's 2008 UWMP. The City of Fresno currently uses groundwater and treated surface water to meet its demands. Surface and ground water supplies are summarized below.

Surface Water

Surface water supplies are provided from the Fresno Irrigation District (FID) and U.S. Bureau of Reclamation. Surface water supplies are treated at the City's Surface Water Treatment Facility (SWTF), which has a design capacity of 30 mgd allowing for 30,800 acre-feet per year (AFY) of treated surface water. Due to operational constraints, however, the operational capacity is currently 27.5 mgd allowing for 28,300 AFY. Surface water supplies are generally considered reliable under most hydrological conditions, with the notable exception of critically dry conditions where the amount of surface water supplies would be limited such that existing and planned surface water treatment facilities would only operate at 78 percent of their full capacities. Under these conditions, the City would rely on increased use of groundwater supplies to compensate for reduced availability of surface water supplies. Below is a brief description of the City's surface water supplies.



Source: West Yost Associates, 2008



City of Fresno Water Division Service Area

Figure 4.13-1

Fresno Irrigation District (FID). The City of Fresno has two contracts with FID to obtain surface water supplies. The FID, which obtains water from the Kings River, is contracted with the City to deliver the City's pro-rate share of FID's water entitlements from the Kings River. This agreement allows the City to a share of water, based on the land area of the City compared to the total area of the FID. More specifically, the proportion of the City's share is calculated based on the ratio of the total area annexed by the City, compared to the total area within the FID's service area including the area served by the City. According to the UWMP, the proportion of the City's share is anticipated to grow over time as the City continues to annex additional land within the FID's service area. In 2005, the City received 92,200 acre-feet of water from FID. The City is estimated to receive 94,800 AFY in 2010.¹

The second contract with FID allows the City to pump treated wastewater into FID canals for delivery to FID customers in return for a proportion of FID's Kings River surface water allocation. Under this agreement the total annual quantity of treated water that can be delivered to FID's canals is limited to 30,000 AFY. The contract further stipulates that the City's entitlement is limited to 46 percent of the recycled water pumped to FID, which is equal to 13,800 AFY. For planning purposes, it is assumed that FID could deliver the 13,800 AF in all hydrological conditions.

US Bureau of Reclamation. The City is currently contracted with the U.S. Bureau of Reclamation through 2045 to receive water from the Central Valley Project (CVP). The CVP obtains water through the diversion of a number of rivers in northern California. In this instance, the City receives water diverted from the San Joaquin River through the Friant-Kern Canal. The City is entitled to 60,000 AFY of Class 1 water. Class 1 water is considered highly dependable. Water allocated to the City under normal conditions is 58,200 AFY. Under critical-low hydrological conditions the allocation may be reduced to 13,900 AFY.

Groundwater

Groundwater within the City of Fresno is provided primarily from the Kings Groundwater Subbasin. The Kings Groundwater Subbasin is located within the San Joaquin Valley Groundwater Basin and underlies Fresno, Kings, and Tulare Counties.² See Figure 4.13-2. The Kings Subbasin has a surface area of approximately 976,000 acres. The City is currently operating 250 municipal water supply wells within the Subbasin.

In 1980 the California Department of Water Resources (DWR) in Bulletin 118-80 identified 11 basins, including the Kings Subbasin as being critically overdrafted. DWR identified that a basin is subject to critical overdraft when the continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts. Although the status of the Kings Subbasin has not changed, DWR has acknowledged efforts being undertaken by the City to ensure that groundwater will continue to be a viable supply. The UWMP estimates that based on natural recharge, subsurface inflow, and intentional groundwater recharge the estimated groundwater yield should be approximately 88,000 AFY. Groundwater pumping for the year 2007 was estimated to be 145,150 AF, which represents a 12% reduction of groundwater pumping as compared to pumping estimates for 2002. Estimated groundwater pumping, however, exceeds the groundwater yield.

¹ City of Fresno. *Urban Water Management Plan*. 2008. Table 4-3, pg. 4-4.

² *Ibid.* pg. 4-8

Through the implementation of additional intentional groundwater recharge and conservation efforts the City projects that groundwater use will balance by 2025. The City believes that this can be realized through the implementation of additional water conservation measures, expanded surface water treatment capacity, increased groundwater recharge, and increased use of recycled water for irrigation and landscaping. Implementation of these measures would ensure the reliability of the City's groundwater supply under all hydrological conditions.³ If the measures cannot be implemented, groundwater pumping will continue to increase, resulting in accelerated overdraft of the Kings Subbasin. Below is a brief discussion of the water supply projects and other measures identified in the UWMP to alleviate demands for groundwater resources. For a more detailed discussion of groundwater resources please refer to **Section 4.8 Hydrology and Water Quality**.

Increased Water Conservation. The City of Fresno currently has extensive water conservation measures to reduce demands for groundwater and surface water resources. Nevertheless, per capita water use by the City's customers continues to exceed water use in surrounding communities. While increased water conservation would not represent a new form of supply, water conserving measures would reduce overall demands and thereby reduce the need for additional supplies and facilities. The UWMP contains 14 demand management measures for urban water conservation, which can generally be categorized into four categories: 1) educational; 2) rehabilitation; 3) metering residential connections; and 4) water waste prohibition. The implementation of additional conservation measures is anticipated to reduce per capita water use by an additional 10 percent by the year 2020.⁴ These measures are discussed in detail in the UWMP and are herein incorporated by reference.

Surface Water Treatment Capacity. The ability of the City of Fresno to provide additional surface water within the City's service area is limited by the operational capacity of the existing SWTF. As identified above, the existing facility is only able to treat 27.5 mgd (28,300 AFY). The City is currently in the process of implementing necessary improvements to the SWTF to expand the treatment capacity to 30 mgd (30,800 AFY) by the end of 2012. The UWMP also proposes to expand the existing capacity of the SWTF to 60 mgd (61,700 AFY) by the end of 2020. In order to further alleviate groundwater demands the City is also planning to provide a new treatment facility in the southeast part of the City. Initial estimates indicated that this facility would be operational by 2015 with a treatment capacity of 60 mgd (61,700 AFY); the City of Fresno has since indicated that funding for the construction of the southeast SWTF has not occurred according to the timeline contained in the UWMP (Personal Communication, Sandra Brock, City of Fresno, October, 2010). Accordingly, the additional surface water treatment capacity associated with this facility will not be operational by 2015 as previously planned. The implementation of capacity improvements contained in the UWMP would increase the current capacity of 27.5 mgd to 120 mgd,⁵ although the availability of this capacity will be contingent upon additional funding being secured. These improvements would increase the proportion of surface water use within the City and reduce overall pumping demands on ground water resources. Increased use of surface water would, however, decrease the amount of natural groundwater inflow. As a result, additional groundwater recharge efforts would be necessary to compensate for the decreased rate of natural groundwater inflow.

Increased Groundwater Recharge. The UWMP identifies that overall groundwater use will decrease overtime as a result of increased surface water treatment capacity. Increased intentional

³ Ibid, pg. 5-6

⁴ Ibid, pg. 4-15

⁵ Ibid, pg. 4-16

groundwater recharge would, however, still be necessary to balance future groundwater operations and offset the decrease in subsurface flow. The City projects that intentional groundwater recharge will increase to approximately 73,700 AFY by 2030, while natural recharge (i.e., subsurface inflow) will decrease over time. Increased intentional recharge is anticipated to occur due to the increased use of existing recharge basins, construction of new basins, and maximization of surface water supplies. The City projects that groundwater pumping will continue to exceed recharge efforts through 2020. The City anticipates balancing groundwater operations by 2025; however, groundwater recharge may be reduced in dry years due to the reduced availability of surface water. While increased intentional groundwater recharge efforts do not represent a new form of supply, these efforts would allow the City to gradually balance groundwater operations. The UWMP estimates that groundwater demands will be 100,600 AFY by 2030.

Recycled Water. The City intends to use recycled water for irrigation, landscaping, and other non-potable water purposes by 2025. This would represent a new source of supply that would offset potential demands for potable water. The City projects that recycled water would reach approximately 25,000 AFY by 2025. In order to promote the use of recycled water the City requires all new developments to install purple pipe for recycled water for irrigation and other non-potable use. Table 4.13-1 summarizes the City's future water supply projects.

Table 4.13-1 Future Water Supply Projects							
Project	Normal Year Supply to City (2030), AFY	Single-Dry Year Supply to City, AFY	Multiple-Dry Year Supply to City, AFY				
			Year 1	Year 2	Year 3	Year 4	Year 5
Expansion of Water Conservation Program ¹	27,600	27,600	27,600	27,600	27,600	27,600	27,600
Expansion of Surface Water Treatment Capacity ²	95,100	95,100	95,100	95,100	95,100	95,100	95,100
Expansion of Groundwater Recharge Program ³	0	0	0	0	0	0	0
Development of Recycled Water	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total:	147,700	147,700	147,700	147,700	147,700	147,700	147,700
Notes:							
1. Does not include additional mandated conservation measures which are assumed to be implemented in the third, fourth, and fifth years of a multiple-dry year period per the City's Water Shortage Contingency Plan (see below).							
2. Includes only expanded treatment capacity, not existing capacity. Planned future treatment capacity provides that there will be adequate available surface water supplies to keep the treatment plants operating at essentially full capacity even in critically dry years.							
3. Expansion of the groundwater recharge program does not directly provide a new supply to the City. Instead it allows the City to gradually bring down groundwater operations into balance, whereby annual groundwater pumpage equals annual groundwater recharge.							
Source: Urban Water Management Plan 2008, Table 4-15.							

Table 4.13-2 provides a summary of the City's current and planned water supplies to the year 2030 taking into account the water supply projects listed in Table 4.13-1. The above projects would significantly increase the amount of surface water supplies while drastically reducing groundwater use by 2030.

Water Supply Source	Current and Planned Water Supplies (AFY)					
	2005 (actual)	2010	2015	2020	2025	2030
Treated Surface Water	15,807	30,800	92,500	123,400	123,400	123,400
Groundwater	141,471	131,750	95,800	82,000	85,000	100,600
Recycled Water	0	750	1,000	1,000	25,000	25,000
Total:	157,278	163,300	189,300	206,400	233,400	249,000

Source: Urban Water Management Plan 2008, Table 4-18.

Fresno Water Demand

The UWMP identified historical and projected potable water demand within the City of Fresno's service area. Future demand was estimated using the population projections and development assumptions contained in the 2025 General Plan. Table 4.13-3 provides a summary of historical and projected demand based on the analysis contained in the 2008 UWMP.

Land Use Category	Annual Water Use (AFY)						
	2000	2005	2010	2015	2020	2025	2030
Single-Family Residential	85,900	83,400	89,700	98,900	109,300	119,700	124,300
Multi-Family Residential	21,800	22,600	23,300	25,600	28,300	30,900	32,100
Commercial/Institutional	24,500	24,900	24,300	29,400	34,900	40,400	43,900
Industrial	4,100	4,000	3,800	5,100	6,400	7,800	8,800
Landscaping	4,600	6,900	6,900	7,100	7,500	7,800	7,800
Southeast Growth Area	-	-	6,700	13,300	20,000	26,800	32,100
Subtotal:	140,900	141,800	154,700	179,400	206,400	233,400	259,300
Unaccounted for Water	15,700	15,800	17,200	19,900	22,900	25,900	27,700
Total:	156,000	157,600	171,900	199,300	229,300	259,300	276,700

Source: Urban Water Management Plan 2008, Table 6-6.

Projected increased demand associated with buildout of the 2025 General Plan would exceed projected future supplies, and additional water conservation measures would be necessary to ensure projected demand does not exceed available supplies. As identified in Table 4.13-2 and discussed above, the City has identified a number of improvements to reduce groundwater demands and increase the amount of surface water available to meet potable demands. In addition, the City has also identified a number of conservation measures as a method to further reduce overall projected water demand. Projected demands identified in Table 4.13-3 above do not take into account reductions in potable demand due to increased conservation efforts. In the absence of additional conservation measures, potable water demand would continue to exceed available supplies and would contribute to groundwater overdraft of the Kings Subbasin. Increased water conservation and the water supply projects identified above would ensure that the

City's potable supply and demand would balance by 2020 and thereby eliminate overdraft pressures on the Kings Subbasin.

Table 4.13-4 shows projected water supplies as compared to anticipated demands taking into account reduced demand associated with the implementation of additional conservation measures. As demonstrated in Table 4.13-4 water demands under normal hydrological conditions would significantly exceed available supplies in the absence of the additional conservation efforts contained in the UWMP. The UWMP plan determined that the implementation of the conservation measures contained therein would ensure that future demand would not exceed future supplies.

Table 4.13-4						
Projected Potable Supplies vs. Projected Demands - Normal Conditions						
	Annual Supply vs. Projected Annual Demand (AFY)					
	2005¹	2010	2015	2020	2025	2030
<i>Useable Supply</i>						
Treated Surface Water	15,807	30,800	92,500	123,400	123,400	123,400
Groundwater	141,471	131,750	95,800	82,000	85,000	100,600
Recycled Water	0	750	1,000	1,000	25,000	25,000
Total:	157,278	163,300	189,300	206,400	233,400	249,000
<i>Projected Demand</i>						
Urban Demand ²	157,600	171,900	199,300	229,300	259,300	276,700
Subtotal (deficit):	(322)	(8,600)	(10,000)	(22,900)	(25,900)	(27,700)
Reduced Demand ³	157,600	163,300	189,300	206,400	233,400	249,000
Total (deficit):	(322)	0	0	0	0	0
Note:						
1. Actual useable water supply, estimated useable supply is 157,300 AFY.						
2. These figures do not include reduction in projected demand due to increased conservation efforts.						
3. Assumes 5% conservation starting in 2010; 10% reduction starting 2020. Final reduced demand rounded to the nearest hundred.						
Source: Urban Water Management Plan 2008, Table 4-18, 6-5						

Water Supply Reliability

In addition to the projections for water demand under normal hydrological conditions identified in Table 4.13-4, the UWMP also projected water demand for single-dry and multiple-dry year hydrological conditions. The UWMP determined that both groundwater resources and recycled water supplies would continue to remain reliable regardless of the hydrological conditions. The treated surface water supplies are considered to be 71 to 100 percent reliable for single-dry conditions due to reduced surface supplies. Under multiple-dry conditions, additional conservation measures, including water rationing, would need to be implemented to ensure adequate supply. During multiple-dry year hydrological conditions it is mandated that water use is reduced by 10 percent for the third and fourth years and 15 percent for the fifth year. These reductions are in addition to existing conservation efforts that are undertaken regardless of hydrological conditions. The UWMP plan determined that the implementation of additional conservation efforts, including the adopted Water Shortage Contingency Plan, would ensure the reliability of supply during multiple-dry year conditions. The adopted Water Shortage Contingency Plan contains additional conservation requirements, depending on the severity of the shortage, which would further reduce water use by up to 50 percent under a critical shortage. Based on the analysis contained in the UWMP, the implementation of additional water

conservation measures would ensure that projected demand does not exceed available supply.⁶ For more information regarding water supply reliability refer to Chapter 7 of the UWMP.

Water Shortage Contingency Plan. The City of Fresno's 1994 Water Shortage Contingency Plan was updated during the course of preparing the 2008 UWMP. The 2008 Contingency Plan includes four stages of water supply shortage. Demand reduction figures and City actions are identified for each of the four stages. The stages range from Stage 1 (minimal shortage: up to 10 percent, with a 10 percent demand reduction target) to Stage 4 (critical shortage: 35–50 percent, with a 50 percent demand reduction target). Actions for Stage 1 are considered voluntary; actions for Stages 2-4 are mandatory. The list of City actions and prohibited water use are identified in the UWMP (see Table 9-2 of UWMP for more information).

Water Distribution System

The City maintains the existing water distribution system and would provide water service to the project site. The project is located within the former County of Fresno Waterworks District 21, a fluoridated potable water system zone. In 1989, the isolated Fresno County Waterworks Districts within the City of Fresno Sphere of Influence (SOI) were merged with the City's water system, which is not fluoridated. As a result, the former Fresno County Waterworks Districts have been isolated from the surrounding non-fluoridated water system in order to maintain a fluoride residual in the water; any new water supply infrastructure within the former County Waterworks District 21 must be isolated from the non-fluoridated portions of the City's water system.

The City of Fresno Department of Public Utilities Water Division has indicated that the existing water supply system serving the former County Waterworks District 21 is considered antiquated. The existing system was constructed largely during the 1950s. As a result the system was not constructed to contemporary standards and is not considered adequate to support new development. For instance, numerous water supply mains are inadequately sized to serve new development and were constructed using steel; these pipelines have deteriorated over time resulting in diminished flow capacity due to distribution losses. Moreover, existing water production wells located in the vicinity of the project site have limited production capacity to accommodate new development. Initial comments articulated by the City identified that these wells, which were constructed between the 1950s and 1970s, did not have surplus capacity to serve future development. The City of Fresno Department of Public Utilities Water Division has since, however, determined that capacity is available to accommodate the project based upon the information provided in the Fig Garden Financial Center IV Utility Infrastructure Report & Public Improvements prepared by Lars Andersen and Associates, Inc. (personal communication, Michael Carbajal, November 2011). Existing water infrastructure is shown in Figure 4.13-3. Proposed new infrastructure is shown in Figure 4.13-4.

In addition to providing potable water supply, the City of Fresno is also responsible for providing fire flow to the site. The City has indicated that, due to the system deficiencies identified above, sufficient water pressure may not be available to meet current fire flow requirements. Pressure drops can occur in a service area when inadequate water supply and distribution systems are present, thereby failing to meet instantaneous peak water demand. A fire flow test was conducted by the Fire Department at hydrant #601, located within the project frontage at W. San Jose Avenue, which identified static pressure of 45 psi, residual of 30 psi at 1,360 gpm, and calculated available flow of 1,800 gpm at 20 psi. According to the City of Fresno, extensive water supply upgrades will be necessary to serve the project site and meet contemporary standards. Existing water distribution infrastructure within the project area includes the following:

⁶ Ibid. see pgs. 7-3 through 7-9; see also Tables 7-1 through 7-21

- 6-inch steel water main located parallel to the west property line, within an existing 5-foot wide water easement;
- 6-inch steel water main located inside and parallel to the east project property line with no existing easement recorded; and
- 6-inch main located north of the project site under W. San Jose Avenue.

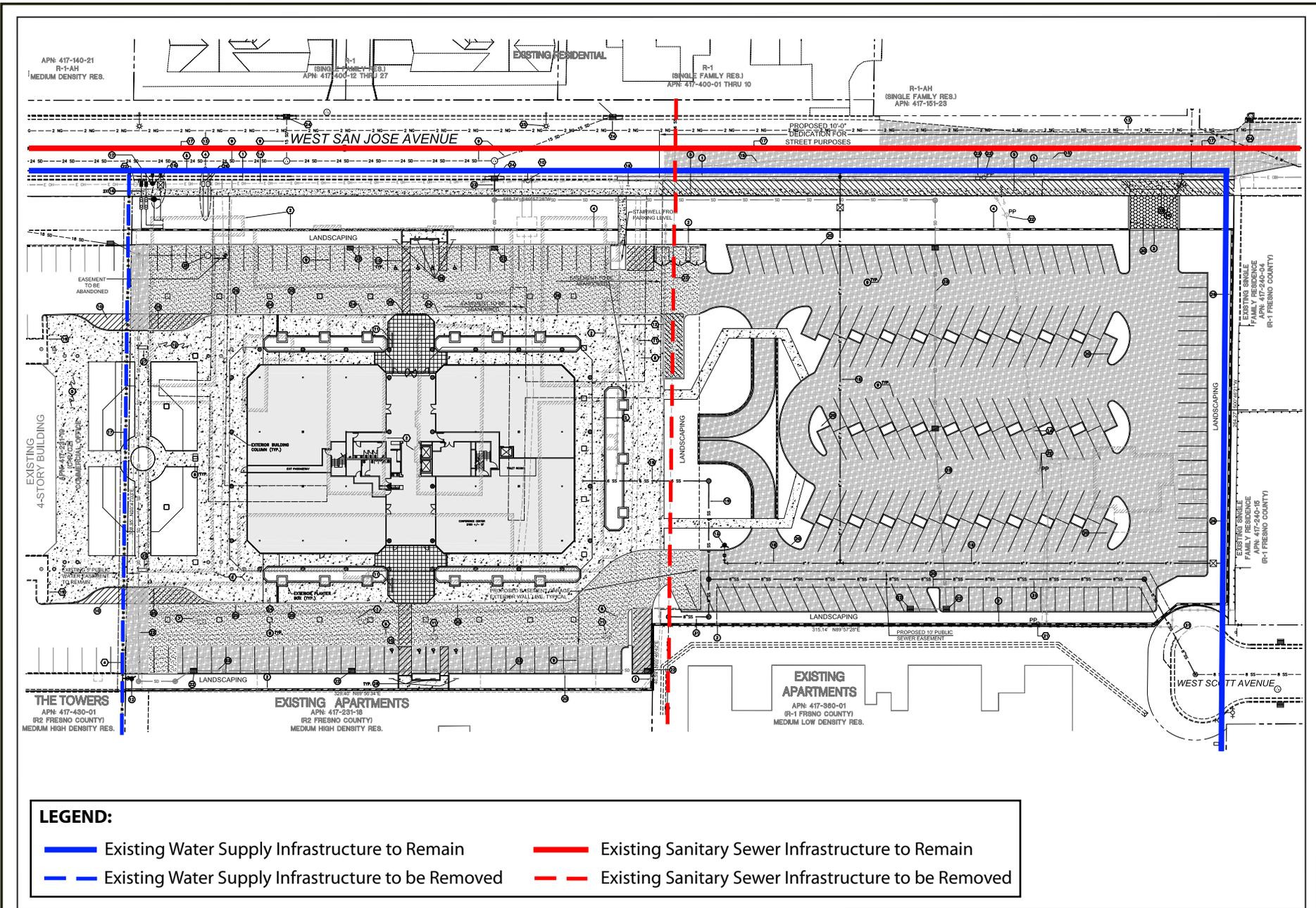
Wastewater

The provision of sanitary sewer or wastewater service in the project area is provided by the City of Fresno. The project is located in the Marks Trunk Sewer Basin; the Marks Trunk line would serve the project. Several projects are identified in the City of Fresno Wastewater Collection System Master Plan to address system capacity deficiencies. These projects include the Marks Avenue Trunk Rehabilitation Project (CM2-REP) and Marks Avenue Trunk Relief Project (CM1-REL). CM2-REP is a capacity relief project that involves the replacement of existing sewer improvements to provide additional sewer capacity. This entailed the replacement of an existing 48-inch diameter sewer main with a new 60-inch sewer main. Funds were allocated in FY08 and a contract awarded in FY09. These improvements have been constructed (e-mail correspondence, Kevin Norgaard, November 30, 2011). CM1-REL is a capacity relief project between McKinley Avenue and Nielsen Avenue. This project is currently in the design phase with construction anticipated in 2012 (ibid.). For a detailed discussion of improvements, please refer to the City of Fresno Wastewater Collection System Master Plan. The City maintains the existing public sanitary sewer system and would provide sewer service to the project site. Figure 4.13-3 shows existing sewer infrastructure within the project vicinity. Figure 4.13-4 shows proposed wastewater infrastructure. Existing sewer infrastructure within the project area includes the following:

- 8-inch Vitrified Clay (VCP) sewer main along W. San Jose Avenue that flows west to east; and
- 8-inch VCP sewer main bisecting the project site, which flows from south to west into the existing 8-inch sewer main at W. San Jose Avenue.

Wastewater Treatment

Project generated wastewater would be treated at the Fresno-Clovis Regional Wastewater Treatment Facility (herein referred to as “Treatment Facility”), which is located in southwest Fresno. Wastewater treatment consists of primary and secondary treatment, as well as a process to treat removed solids. The existing treatment capacity for primary and secondary treatment is 88 mgd (personal communication, Rosa Lou-Staggs, June 11, 2010). Average wastewater flow through the Treatment Facility in 2010 was approximately 66 mgd (personal communication, Tom Krenz, March 3, 2011). The City of Fresno Wastewater Management Division is planning to expand wastewater treatment capacity by developing satellite wastewater treatment plants; however, such plans are not yet funded or under construction.



Existing Infrastructure and Utilities

Figure 4.13-3

Solid Waste

Solid waste collection and disposal services in the project area are provided by the City of Fresno Solid Waste Management Division, which provides trash, recycling, and green waste collection. Waste is transported to various locations depending on type. Solid waste or trash is taken to Cedar Avenue Recycling and Transfer Station. Recyclable materials and organic waste are diverted from the waste stream and are disposed of elsewhere; the City of Fresno diverts approximately 56 percent of solid waste. The remaining waste is taken to the American Avenue Landfill in Kerman. American Avenue Landfill is considered a sanitary landfill, which is defined as a disposal site for non-hazardous solid waste. The American Avenue Landfill is owned and operated by Fresno County. The landfill is expected to remain operational until 2065, when it is anticipated to be full and require closure. The landfill has a maximum permitted disposal rate of 3,000 tons per day. The existing rate of disposal at the landfill is approximately 1,000 tons per day (personal communication, Heriberto Cantu, August 8, 2011).

Natural Gas and Electricity

Pacific Gas & Electric Co. (PG&E) provides gas and electric service to the project site. Natural gas is measured in British thermal units (Btu), which is the quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit. Electricity is measured in kilowatt hours (kwh). A kilowatt (kw) is a measure of power produced through sources of generation at 3,413 Btu/kw-hour. Most electricity is produced by consuming other primary energy sources and converting them into electricity. In the project vicinity, PG&E maintains electric and gas facilities along W. San Jose Avenue, where the project would connect service. PG&E has an existing overhead power line that runs along the south side of W. San Jose Avenue. PG&E also has an existing two-inch gas main along W. San Jose Avenue within the existing street pavement.

Regulatory Requirements

2025 Fresno General Plan. The 2025 Fresno General Plan contains several policies to ensure that adequate utilities and services systems are provided within the City of Fresno. Please refer to Table 4.9-2 of the Land Use Section for a detailed analysis of the project's consistency with the relevant utilities and service systems provisions of the General Plan and Bullard Community Plan.

The City of Fresno 2025 Fresno General Plan Master EIR evaluated potential adverse environmental effects associated with buildout according to the General Plan. The Master EIR identified several direct environmental effects associated with buildout related to inadequate trunk sewer capacity and wastewater treatment. The Master EIR identified several mitigation measures to ensure that those impacts would be reduced to a less-than-significant level. Applicable mitigation measures include policies designed to ensure that 1) adequate trunk sewer and collect main capacity is available, 2) existing sewer system is continually monitored to ensure capacity, 3) ensure adequate treatment capacity at the Fresno-Clovis Regional Wastewater Reclamation Facility, 4) ensure adequate trunk sewer capacity prior to the approval of new development, and 5) provide adequate facilities for the collection of solid waste.

City of Fresno Municipal Code. The City of Fresno Municipal Code Section 6-520 contains a number of regulations to prohibit water wastage. Applicable regulations pertain to on-site water use for landscaping, car washing, and other activities to ensure that water use does not result in the willful or negligent use of water. In addition, City of Fresno Municipal Code Section 6-301 contains additional regulations related to the disposal of sewage and water that would be applicable to the project. These regulations are intended to ensure consistency with applicable state and federal laws in accordance with the Clean Water Act of 1977. City of Fresno Municipal

Code Section 6-303 identifies sewer connection requirements; sewer connection fees and trunk sewer fees are identified in Section 6-304. The project would be required to comply with all applicable provisions of the City of Fresno Municipal Code related to the provision of utilities.

Thresholds of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects.
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

In addition to the thresholds of significance contained in the CEQA Guidelines, the California Supreme Court in *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (California Supreme Court Case No. 02CS01214) identified a number of additional principles related to the analysis of water supplies for project subject to CEQA. These additional principles that are applicable to the following analysis are summarized below.

- An EIR must provide sufficient facts to allow decision makers to evaluate the costs and benefits of supplying the necessary amount of water to meet project demands.
- CEQA analysis cannot rely on merely "paper water." An EIR must identify whether the water is considered reliable and discuss why the identified water should reasonably be expected to be available. An EIR cannot rely on speculative future supplies.
- When some uncertainty regarding availability of future water supply exists, an EIR should acknowledge the degree of uncertainty, include a discussion of possible alternative sources, and identify the environmental impacts of such alternative sources.
- An EIR does not need to show that water supplies are definitely assured, because such a degree of certainty would be "unworkable, as it would require water planning to far outpace land use planning."

- An EIR analysis may rely on existing urban water management plans, so long as the project's new demand was included in the water management plan's future demand accounting.

Impacts and Mitigation

Water Supply

The following impact analysis has been prepared in compliance with the legal principles established in *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (California Supreme Court Case No. 02CS01214) and applicable CEQA standards. Information contained in this section represents the City's independent analysis of the project's potential impacts related to water supply. Project impacts related to groundwater overdraft and hydrology are addressed separately in Section 4.8 Hydrology and Water Quality of this EIR. To the extent that groundwater represents the City of Fresno's primary water supply, water supply impacts related to groundwater will also be discussed.

Water Demand

Water demand estimates associated with the proposed project were prepared by the project applicant and included as part of the Utility Infrastructure Report & Public Improvements prepared by Lars Andersen and Associates, Inc. A copy of this report is contained in Appendix I. The City of Fresno Department of Public Utilities Water Division has independently reviewed the demand estimates prepared by the project applicant. The water demand estimates developed by the applicant are based on the metered reading data from the existing office buildings located in the Fig Garden Financial Center. Water use for these buildings is considered representative of anticipated water demand associated with the proposed project due to the similarity of structure and use (personal communication, Michael Carbajal, September 2011).

In addition to the water demand estimates prepared by the project applicant, this EIR also contains water demand estimates for the project consistent with the demand forecasting methodology used in the 2008 UWMP. Projected future water demand estimates were prepared using the land use based demand methodology contained in the UWMP, which calculated water demand using land use acreage and unit demand factors. The UWMP developed water demand projections for the various land uses as envisioned in the City's 2025 General Plan. For the purposes of this EIR, these water demand estimates are considered representative of the lower range of anticipated future water demand; these estimates are based on a general land use category for commercial uses and are not considered use-specific or project-specific. These estimates are provided for informational purposes only. The water demand estimates prepared by the applicant are considered more appropriate given the similarities between the proposed project and adjacent office uses (personal communication, Michael Carbajal, September 2011). Table 4.13-5 identifies the existing water projections based on existing land uses according to the 2008 UWMP, projected future demand according to the UWMP, as well as project-specific demand estimates provided by the applicant.

Table 4.13-5 Urban Water Management Plan Existing Water Demand Projections, Projected Future Demand and Actual Anticipated Water Use			
Use	Unit/Acres ¹	Demand Factor (AF/AC/YR) ²	Total Demand (AFY)
Existing Water Demand Projections (UWMP)			
Single-Family Residential	2.34	3.5	8.19
Multi-Family Residential	2.35	6.2	14.57

Table 4.13-5 Urban Water Management Plan Existing Water Demand Projections, Projected Future Demand and Actual Anticipated Water Use			
Use	Unit/Acres ¹	Demand Factor (AF/AC/YR) ²	Total Demand (AFY)
Subtotal:			22.76³
Projected Future Demand (UWMP)			
Commercial	4.69	1.9	8.91
Landscaping	0.8	-	2.38 ⁴
Subtotal:			11.19³
Applicant Generated Demand Estimates⁵			
Commercial	-	-	9.2
Landscaping	0.8	-	2.6
Subtotal:			11.8
Net Water Use:			(10.96 - 11.57)
Notes:			
1) Water demand projections are estimated using the methodology contained in the 2008 UWMP, which estimates water use according to acres of use.			
2) Demand factors for 2010 were used to ensure consistency with the 2008 UWMP.			
3) Water demand estimates contained in this table are significantly less than the water demand projections for residential water use. This value is based entirely on the amount of acres of commercial use proposed as part of the project, which is then subsequently multiplied by the demand factor contained in the 2008 UWMP.			
4) Maximum Applied Water Allocation (MAWA): (ETo) x (0.62) x [(0.7 x LA)+(0.3 x SLA)]			
5) Demand estimates provided by applicant; these estimates are based on similar uses in the Fig Garden Financial Center. The City has determined that these estimates are reasonable for the purposes of analyzing the project's potential impacts related to water supply.			

The 2008 UWMP land use based demand projections are derived from land use categories on a per acre basis. Table 4.13-5 identifies the site's existing water demand projection based on the site's current zoning; the project site has an existing projected water demand of 22.76 AFY assuming full-buildout according to existing zoning. This estimate represents the projected water demand for the site based on the assumptions contained in the 2008 UWMP. Table 4.13-5 also identifies the projected demands associated with the proposed project using the land use methodology contained in the 2008 UWMP. Commercial use of the site, in addition to landscaping irrigation requirements, is anticipated to generate a water demand of 11.19 AFY. Table 4.13-5 also contains water demand estimates prepared by the project applicant. The applicant estimated that the project would generate a water demand of 11.8 AFY. This estimate is based on an anticipated interior demand of 9.2 AFY and exterior demand of 2.6 AFY.

The project's estimated water demand is anticipated to range between 11.19 and 11.8 AFY. The estimates provided by the project applicant represent the outer range of anticipated water use.⁷ The water demand estimates prepared by the project applicant, in addition to the estimates generated using the UWMP land use based approach, provide a reasonable range of anticipated future water use in connection with the proposed project. These water demand projections are considered sufficient for the purposes of water supply planning. While this EIR recognizes that water use will vary on-site, the estimates developed in Table 4.13-5 are considered appropriate for the purposes of this water supply analysis and CEQA. Moreover, despite the slight difference in anticipated demand, the project would still generate significantly less water demand than anticipated in the 2008 UWMP based on the site's existing residential demand. Projected future

⁷ The applicant generated estimates are based under the assumption that the proposed project, due to improved water use efficiency, would generate 20% less interior water demand than compared to the existing adjacent office structures.

water demand associated with the proposed project is anticipated to range between 10.96 and 11.57 AFY less than originally projected in the UWMP. Additional water use associated with the project would occur during the project construction phase. According to the project applicant, project construction would generate a construction phase water demand of approximately 70,000 gallons. Temporary water use in connection with project construction would represent a negligible increase in water use and would be temporary in nature. The project would not exceed the site's existing water use projections contained in the 2008 UWMP.

While the proposed project is not anticipated to exceed projected demands contained in the 2008 UWMP, the project would exceed on-site water use as compared to existing use (vacant apartment complex). Table 4.13-6 identifies existing water use based on the current use (vacant apartment complex); on-site water use is limited to exterior use for landscaping purposes. Existing on-site water use is approximately 5.68 AFY.⁸ On-site water use is considerably less than the anticipated water demand associated with the project. Project water demand is anticipated to exceed existing (current) water use by approximately 6.12 AFY. It is important to recognize, however, that the water use information contained in Table 4.13-6 does not account for the actual, historical, use associated with the existing apartment complex. Water use associated with the proposed project, when compared to actual historical water use (exterior and interior) as reported by metered reading data, is similar (approximately 11.4 AFY). Nevertheless, for the purposes of this analysis the project would exceed on-site water use.

APN	Use	Interior Demand (AFY)	Exterior Demand (AFY)	Total Demand (AFY)
417-240-03	Residential Medium Low Density	-	-	-
417-240-37 ¹	Residential Medium Low Density	-	-	-
417-231-16 ²	Residential Medium High Density	-	5.68 ³	5.68
417-231-17	Residential Medium Low Density	-	-	-
Subtotal:		-	5.68	5.68
			Total:	5.68²
Notes:				
1) Site was previously developed with a single-family residential unit. The residence was previously demolished.				
2) For the purposes of the following analysis, the CEQA baseline is considered the current use, a vacant apparent complex. ⁸ At this time water use is limited to maintain existing landscaping and other maintenance needs. This information is based on water meter data for each of the project parcels. Historically the apartment complex had an interior demand of 5.46 AFY. Total on-site water use was historically 11.4 AFY; this information is provided for information purposes only.				
3) Based on estimate provided by project applicant that indicates there is approximately 85,377 square feet of existing irrigated landscaping on the project site. This value was subsequently multiplied by the UWMP irrigation demand factor of 2.9 AFY. This estimate is slightly less than the calculated MAWA, which is 5.81 AFY.				

⁸ CEQA Guidelines §15125(a) identifies that the existing environmental setting (at the time the notice of preparation is prepared) should normally constitute the baseline against which an agency assesses the significance of project impacts. The Courts (see for instance *Cherry Valley Pass Acres and Neighbors v. City of Beaumont*), however, have recognized that in specific circumstances an alternate baseline may be appropriate. The decision to use an alternate baseline must be supported by substantial evidence. In the case of the proposed project, this EIR considers the baseline as the site's current use (vacant apartment complex), although an alternate baseline could be considered appropriate in light of historical water use information.

Water Supply Availability

The California Supreme Court in *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (California Supreme Court Case No. 02CS01214) identified two important principles related to water supply analysis that are particularly pertinent to the proposed project. First, the California Supreme Court determined that an EIR cannot rely entirely on “paper water,” but must identify whether the proposed supply is considered reliable and why the water should be reasonably expected to be available; an EIR cannot rely on speculative water supply projects as justification for a reliable supply. Secondly, an EIR analysis may only rely on an existing UWMP provided that the project’s new demand was included in the UWMP’s future demand accounting.

As discussed above, the City of Fresno primarily relies on groundwater supplies in order to meet municipal demand. The Kings Subbasin is currently in a state of overdraft and the City has undertaken extensive water planning efforts to reduce its reliance on groundwater by increasing the use of surface water supplies to meet municipal demands. The primary challenge to the reliability of the City’s water supplies is the continuing overdraft of the Kings Groundwater Subbasin. The City has plans to expand both surface water treatment capacity and groundwater recharge capacity. The City of Fresno anticipates that these efforts, in addition to extensive conservation measures, would allow the City to resolve the current overdraft conditions by 2025.

Currently, the amount of surface water available to meet potable water demands is constrained by infrastructure capacity limitations. The City’s surface water treatment facility has an existing capacity of approximately 2.7 mgd or 28,300 AFY. The City has identified a number of improvements in the UWMP to expand the capacity of the City’s existing surface water treatment facility and construct a new facility to increase overall capacity to 123,400 AFY. These improvements are not anticipated to be operational until at least 2015, although City staff has indicated that funding still needs to be secured for some of the improvements. As a result, the City will continue to rely on groundwater as its primary source of potable water.

The UWMP identifies the existing and future sources of supply, their reliability, and City efforts to reduce overall groundwater demands. In addition, the City has also identified a series of extensive conservation measures to reduce projected water demand. The City has developed a Water Shortage Contingency Plan that contains additional requirements, depending on the severity of the shortage, which would further reduce water demand during multiple-dry years. The implementation of additional water conservation measures would ensure that projected demand under the 2025 General Plan would not exceed available supply under single-dry and multi-dry years. The City has identified funding sources, budgeted, and taken other specific implementation steps to ensure completion by 2015 of needed projects. The City is also in the preliminary planning stage for projects needed after 2015. These additional supplies, therefore, are not considered speculative, although the City has indicated that funding is still needed to increase surface water treatment capacity.

In addition to ensuring the reliability of supply, the UWMP also detailed water demand projections assuming full buildout under the 2025 General Plan. The City’s UWMP utilized two different methodologies in order to estimate anticipated future water demand. The UWMP projected anticipated water demand using a population based model and a land use based demand model. The population model projected future per capita water use based on population projections for the year 2025, whereas the land use model estimated future water use according to the land use assumptions contained in the 2025 General Plan. Projected water demand using the population based methodology at 2025 was estimated to be between 209,400 AFY and 239,000 AFY. The land use based methodology, which accounted for water conservation measures, projected 2025 water use to be approximately 233,400 AFY. The UWMP concluded that the per

capita and per land use based projections were “sufficiently close for planning purposes in this UWMP.”⁹ Development of the project site was considered as part of the 2008 UWMP.

The UWMP anticipated buildout of the project based on the site’s existing residential land use designations. The UWMP anticipated a residential water demand of approximately 22.76 AFY. Commercial development of the site, although not previously considered in the 2008 UWMP, would significantly reduce the amount of projected water use on-site as compared to the site’s existing land use designations. Project development would not exceed the land use and/or development assumptions contained in the 2008 UWMP such that the project’s projected water demand was not previously considered and/or included in the UWMP future demand accounting. The project would not exceed the projected water demand identified for the subject site in the 2008 UWMP. Therefore, the project’s new water demand was previously considered as part of the 2008 UWMP demand forecasting.

Conclusion

For the purpose of this analysis, the proposed project would result in a significant adverse impact under CEQA if the project would significantly increase on-site water demand beyond the water demand projections contained in the 2008 UWMP thereby necessitating new or expanded sources of water supply. Increased water demand beyond the UWMP projections would increase the amount of groundwater withdrawal, thereby further exacerbating overdraft conditions in the Kings Subbasin. In addition, increased water demand could also result in additional environmental impacts (e.g. water supply shortages) if demand significantly exceeds available water supply beyond levels considered in the UWMP.

The proposed project is not anticipated to increase demands beyond the projections contained in the 2008 UWMP. The UWMP, assuming full residential buildout of the site, anticipated a water demand of approximately 22.76 AFY. Development of the project site for commercial/office purposes would result in a considerably lower water demand as discussed in detail above; the project would generate a commercial water demand ranging between 11.19 and 11.8 AFY, in addition to approximately 70,000 gallons of construction water use. Development of the proposed project would result in significantly less water demand than previously anticipated in the 2008 UWMP. As a result, the project is not anticipated to exacerbate existing groundwater conditions and/or require expanded sources of supply. The project would, however, increase demand beyond existing use. This increase in demand would not exceed the demand projections contained in the 2008 UWMP. As a result, sufficient supply is available to accommodate project generated demands.

In order to ensure that potential impacts to groundwater resources are reduced to the greatest extent feasible consistent with the intent of the 2008 UWMP, the applicant has proposed a series of project design measures to reduce groundwater impacts. These measures are intended to reduce groundwater demand associated with the project through increased conservation measures at the existing Fig Garden Financial Center; existing water use associated with the Fig Garden Financial Center is presented in Table 4.13-7. These measures were previously developed in collaboration with the City of Fresno Department of Public Utilities Water Division.

⁹ City of Fresno. *Urban Water Management Plan*. 2008. pg. 6-6.

APN	Use	Interior Demand (AF/YR) ¹	Exterior Demand (AF/YR) ¹	Total Demand (AFY)
417-231-19	Commercial Office	11.34	9.03	20.37
417-140-26	Commercial Office	11.84	-	11.84
417-140-27	Commercial Office	8.09	7.35	15.44
417-140-21	Commercial Office	-	5.42	5.42
Total:		31.27	21.8	53.07
Notes:				
1) Actual water use is based on water meter data for each of the project parcels.				

The City has determined that water conservation and infrastructure improvements at the existing Fig Garden Financial Center, in addition to conditions of approval related to landscape efficiency, would minimize project impacts related to water supply. The project applicant estimates that these project design measures would reduce interior and exterior water demand at the Fig Garden Financial Center by approximately 11.86 AFY. Table 4.13-8 conservatively estimates the water use reductions associated with these measures. Several additional standard conditions of approval would also reduce water demand, but the extent of that reduction cannot be quantified at this time.

Mitigation Measure	Description	Normal Conditions		Mitigated Conditions		Net Demand AFY
		Unit/Acre	Demand AFY	Unit/Acre	Demand AFY	
4.13-1	Financial Center Retrofit ¹	110 toilets	1.92 ²	110 toilets	0.88 ³	(1.04) ⁴
4.13-2	Irrigation System Retrofit ⁵	-	21.8	-	17.88 ⁷	(3.92)
Net Water Use Savings:						4.96
<p>1) Consists of retrofitting 110 toilets in the Fig Garden Financial Center from 3.5 gallons to 1.6 gallons per flush. Also includes retrofitting existing sinks and fixtures with automatic sensors.</p> <p>2) Estimate was calculated using the following methodology: (6.8 flushes/day/toilet)x(gallon/toilet)x(240days/year)x(110 toilets)/(325,851 gallons)</p> <p>3) See note 2 above.</p> <p>4) This value does not account for water use reductions associated with the retrofitting of existing sinks and other fixtures. As a result, additional water savings can be anticipated.</p> <p>5) Consists of retrofitting all existing irrigation controllers with evaporation transpiration controllers that include soil probes and rain sensors. In addition, all new controllers will be similarly designed.</p> <p>6) Demand based on metered exterior water demand at the Fig Garden Financial Center as identified in Table 4.13-7.</p> <p>7) Assumes 18% reduction of water use through the use of smart controller and other features. Source: U.S. Department of the Interior Bureau of Reclamation, 2008, Summary of Smart Controller Water Savings Studies.</p>						

Based on the information contained in Table 4.13-8, this EIR conservatively estimates that project-specific design features would reduce existing water demand at the Fig Garden Financial Center by approximately 4.96 AFY; additional water use savings may be realized through the implementation of these measures but quantification of these potential reductions would be considered speculative at this time. Implementation of these design measures would minimize the project's potential effects related to water supply by offsetting a portion of water use associated with the project through the implementation of water conservation measures at the existing Fig Garden Financial Center. The proposed project would not exceed the site's projected water demand under the site's existing land use designation according to the UWMP.

The project would not represent a significant adverse environmental effect under CEQA. Implementation of the following project design measures, which shall be incorporated as conditions of approval, would minimize water demand associated with the proposed project. The project would have a less-than-significant effect on water supply. Implementation of these design measures are not anticipated to result in any new and/or expanded environmental effects beyond those previously evaluated in this EIR. Development of the proposed project is not anticipated to exceed the amount of water demand projected in the 2008 Urban Water Master Plan based on the land use based model for estimating water demand. **The project would have a less-than-significant impact on water supplies; the following project design measures, which shall be incorporated as conditions of approval, are proposed to further reduce exterior and interior water use to the maximum extent feasible.**

- The project proponent, prior to the issuance of any certificate of occupancy, shall retrofit all existing restrooms in the Fig Garden Financial Center. A minimum of 110 toilets shall be retrofitted to reduce water usage per flush from 3.5 gallons to 1.6 gallons. Existing urinals shall be replaced with waterless urinals. All sinks and associated fixtures shall be upgraded to automatic sensors to further conserve water. Prior to the issuance of a certificate of occupancy, the project proponent shall provide evidence demonstrating compliance with this measure, subject to the review and approval of the City of Fresno Department of Public Utilities Water Division. The City of Fresno Department of Public Utilities Water Division shall inspect all restroom facilities at the Fig Garden Financial Center to confirm compliance with this measure.
- The project proponent, prior to the issuance of any certificate of occupancy, shall retrofit the existing irrigation controllers associated with the Fig Garden Financial Center’s landscaping with evaporation transpiration controllers that include soil probes and rain sensors. Prior to the issuance of any certificate of occupancy, the project proponent shall submit evidence to the City of Fresno Department of Public Utilities Water Division demonstrating that the existing irrigation system has been upgraded to meet the requirements of this measure. The City of Fresno Department of Public Utilities Water Division shall inspect the retrofitted irrigation system to confirm compliance with this measure.
- Prior to the issuance of any certificate of occupancy, the project proponent shall submit an irrigation and landscaping plan that demonstrates that all future landscaping associated with the proposed project will utilize evaporation transpiration controllers that include soil probes and rain sensors, subject to the review and approval of the City of Fresno Department of Public Utilities Water Division. Irrigation controllers shall be set to operate during the off peak water demand periods.
- All new landscaping proposed in connection with the proposed project shall conform to the State of California’s “Waterwise” standards. The project shall meet and/or exceed those standards. Prior to the issuance of any building or grading permit, the project proponent shall submit a detailed landscaping plan to the City of Fresno Department of Public Utilities Water Division and the City’s Planning Division demonstrating that proposed landscaping meets and/or exceeds the “Waterwise” standards. All landscaping shall be installed prior to issuance of an occupancy permit.

Water Supply Infrastructure

The City of Fresno Department of Public Utilities Water Division has identified several concerns related to the adequacy of existing infrastructure, including the production capacity of existing wells, the antiquated nature of existing distribution facilities, and decreased groundwater

production due to ground water contamination.¹⁰ As a result, development of the proposed project would necessitate a number of infrastructure improvements to address existing system deficiencies and ensure that adequate infrastructure capacity is available to serve the proposed project. In the absence of infrastructure upgrades, the proposed project could adversely impact the existing water distribution system serving the project area. The City of Fresno Department of Public Utilities Water Division has identified specific measures to ensure that adequate capacity is available to accommodate projected future demands.

According to the City of Fresno, existing water pressure may be inadequate to serve a multi-story commercial/office structure. The City has identified that the existing system is largely considered antiquated and would require upgrades to meet project demands. Initial comments articulated by the City of Fresno Department of Public Utilities Water Division identified concerns related to the adequacy of existing water supply wells in the vicinity of the project. Specifically, the City identified that existing wells may not have adequate production capacity to serve the project. The City identified that these wells have limited capacity and were designed to serve existing development. As a result, the City initially identified that these wells may not have surplus production capacity available to serve the project. At the time of the Notice of Preparation (NOP), the City identified that a new or expanded source of production capacity would be necessary in order to meet anticipated project demands. The City of Fresno Department of Public Utilities Water Division has, however, since determined that adequate production capacity exists to serve the project. No new or expanded sources of supply are necessary to serve the project; other infrastructure improvements are still, however, warranted (personal communication, Michael Carbajal, September, 2011).

The project, as currently proposed, includes a number of infrastructure improvements to address the City's concerns regarding existing capacity, water pressure, peak demand, fire flow, and fluoridation. Specifically, the proposed project includes upgrades to the existing 6-inch water main adjacent to the project site in order to provide adequate water pressure and pipeline sizing; the project will replace the existing 6-inch main along the western boundary of the property with an 8-inch main in order to maintain adequate water pressure and replace antiquated infrastructure.¹¹ The proponent has also proposed three new fire hydrants, including two public hydrants and one private hydrant, as well as a fire sprinkler pump. The fire sprinkler pump is necessary to comply with applicable fire flow requirements. Additional improvements include an 8-inch fire service line with double detector check valve, a 4-inch domestic water service line with backflow prevention assembly and a 2-inch landscape irrigation service with backflow assembly. An on-site domestic and fire pump is also proposed to maintain adequate water pressure. The project, which is located within a fluoridated water zone, will also provide a fluoridation system and booster pump to ensure that the existing fluoride district, District 21, is isolated from the surrounding non-fluoridated system.¹² Proposed water distribution infrastructure improvements are depicted in Figure 4.13-4.

¹⁰ Groundwater contamination has limited the availability of suitable sites for new groundwater production wells.

¹¹ Based upon further review by the City of Fresno Department of Public Utilities Water Division, the replacement of the existing 6-inch main has been determined unnecessary. The City will require that the project provide a second point of connection to the existing North Roosevelt/North Wishon Avenue water main loop from the 12-inch main in West Shaw or the 8-inch main located in an easement west of North Roosevelt Avenue.

¹² The project site is located in the former County of Fresno Waterworks District 21, a fluoride district. In 1989, the isolated Fresno County Waterworks Districts within the City of Fresno SOI were merged with the City's water system, which is not fluoridated. As a result, the former Fresno County Waterworks Districts

In addition to the specific improvements that are necessary to serve the project, the City has also determined that a number of infrastructure upgrades are warranted to address existing system deficiencies. The City is currently in the process of reviewing the existing system to determine the scale and nature of necessary improvements. These improvements are warranted regardless of the project and are necessary to replace and/or improve existing deficient facilities. These improvements are warranted under existing conditions. As a result, the project will be required to contribute its fair share towards the construction of future improvements through the payment of standard connection fees and standard development impact fees.

In summary, given the constraints of the existing water system in the project area, the City has identified several infrastructure improvements to address existing deficiencies and ensure that sufficient production and infrastructure capacity will be available to accommodate project demands. The project proposes a number of improvements to address these system limitations. The following mitigation measures were identified by the City of Fresno Department of Public Utilities Water Division to ensure project impacts related to infrastructure and production capacity are reduced to a less-than-significant level. These measures are in addition to the conditions of approval identified above and conditions of approval related to the payment of facility impact fees. In addition, the City, as a condition of approval, will also require that the applicant eliminate the proposed replacement of the existing 6-inch main along the project's western boundary. The condition will require that the applicant provide a second point of connection to the existing North Roosevelt/North Wishon Avenue water main loop from the 12-inch main in West Shaw or the 8-inch main located in an easement west of North Roosevelt Avenue. Implementation of the following mitigation measures would not result in any new or expanded environmental affects beyond those analyzed in this EIR.

Impact **Development of the proposed project would require the construction of new water infrastructure in order to address existing infrastructure deficiencies identified by the City of Fresno. *This represents a potentially significant impact that can be reduced to a less-than-significant level with implementation of the following mitigation.***

Mitigation

4.13-1 In order to ensure adequate water system distribution capacity, the project applicant shall replace the existing 8-inch water main in North Palm Avenue between West Shaw Avenue and West Barstow Avenue with a 12-inch water main. The City of Fresno Department of Public Utilities Water Division has determined that these improvements are necessary to accommodate the proposed project. Prior to the issuance of any building permit, the project proponent shall submit design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating that adequately sized infrastructure will be provided in accordance with this mitigation measure. Design-level drawings shall be subject to the City's review and approval.

4.13-2 In order to ensure adequate water system distribution capacity, the project applicant shall replace the existing 6-inch water main in West San Jose Avenue from North Colonial Avenue to approximately 850 feet east with an 8-inch water main. The City of Fresno

have been isolated from the surrounding non-fluoridated water system in order to maintain a fluoride residual in the water. As a result, all infrastructure provided in connection with the proposed project will require isolation from the non-fluoridated portions of the City's water system unless otherwise approved by the City of Fresno Department of Public Utilities Water Division.

Department of Public Utilities Water Division has determined that these improvements are necessary to accommodate the proposed project. Prior to the issuance of any building permit, the project proponent shall submit detailed design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating compliance with this measure. Final plans shall be subject to the City’s review and approval.

4.13-3 Install booster pump facilities to serve the project’s domestic and fire water use. Prior to the issuance of any building permit, the project proponent shall submit detailed design-level drawings to the City of Fresno Department of Public Utilities Water Division demonstrating that booster pump facilities will be provided to meet domestic and fire demand of the project. Final plans shall be subject to the City’s review and approval.

4.13-4 Prior to the issuance of any building permit, the project proponent shall submit detailed infrastructure plans that include pipelines within the project site to interconnect to future recycled water distribution mains that may be developed by the City to allow supply of such recycled water for on-site irrigation purposes, subject to the review and approval of the City of Fresno Department of Public Utilities Water Division and the Planning Division.

Wastewater

Development of the proposed project, based on the commercial demand factors identified by the City of Fresno, would generate approximately 20,918.6 gallons per day (gpd) of wastewater. Table 4.13-9 identifies proposed wastewater generation estimations. The project would result in 20,918.6 gallons per day of wastewater generated on-site. All project generated wastewater would be treated at the Fresno-Clovis Regional Wastewater Treatment Facility. The proposed project would represent a significant environmental effect under CEQA if the project, due to increased wastewater generation, would necessitate the construction and/or expansion of new or existing wastewater treatment facilities.

Table 4.13-9 Wastewater Generation Estimate				
Use	Dwelling Units/Units	Daily Rate (gpd/unit) ²	Generation (GPD)	Generation (MGD)
Commercial/Office	104,593	200 gpd/1,000 sq ft.	20,918.6	0.020
Source Estimates:				
1. For CEQA Baseline purposes, the Wastewater Generation Estimate assumes the property’s current status as a vacant apartment building and a single family residential site. However, it should be noted that the prior historical interior wastewater generation for the site as a 44 unit multi-family residential complex is estimated at 8,157.6 gpd (assuming 103 gpd/person). In addition, the existing single-family residence would account for 659.2 gpd.				
2. City of Fresno, Wastewater Collection System Master Plan, 2006; project correspondence Rosa Lau-Staggs (June, 11, 2010)				

The Treatment Facility currently has a design capacity of 88 mgd with current flows that average 66 mgd. The proposed project would incrementally increase, albeit insignificantly, wastewater flows to the Treatment Facility. Project generated wastewater would represent a negligible increase in wastewater flows to the Treatment Facility. The Treatment Facility has sufficient existing and planned capacity to accommodate increased demands generated from the proposed project and no new treatment facilities or expansion to the existing facility would be necessary. **This represents a less-than-significant impact under CEQA.**

In order to accommodate the development and scale of the proposed project, existing infrastructure in the project vicinity would need to be extended to serve the project. Project-specific infrastructure improvements would be necessary to meet project demands. In addition, the City of Fresno has identified that the hydraulic loading associated with the proposed project should not exceed the design capacity of the sanitary sewer lines at peak flow based on estimated full build out of the area and according to the City's General Plan. As proposed, the project would intertie into an existing 8-inch sanitary sewer main that transects the project site with a private 6-inch sanitary sewer line. In addition, the proposed project also entails the installation of an 8-inch public sewer line that would connect the existing 8-inch main transecting the site with the existing 8-inch main located within West Scott Avenue. Proposed infrastructure improvements are identified in Figure 4.13-4. These improvements would provide sufficient capacity to accommodate wastewater generated in connection with the proposed project.

The City of Fresno has indicated the existing trunk sewer line serving the project area has limited capacity. The City's Wastewater Collection System Master Plan has identified several Capital Improvement Projects (CIPs) to expand the capacity to accommodate anticipated flow volumes based on General Plan build out. The City of Fresno has an established sewer connection fee that includes a trunk sewer charge, which is a flow-based capacity charge. These fees are used for the purpose of recovering costs for construction or recovering the costs of new trunk sewers. The project will be required to pay all applicable sewer connection fees, including the trunk sewer charge pursuant to Chapter 6, Article 3 of the Fresno Municipal Code. The payment of sewer connection fees is considered adequate mitigation for the purposes of CEQA. In order to ensure that project infrastructure is sufficient to serve the project and would not adversely affect the existing system, the City of Fresno, as a condition of approval, will require that the project proponent obtain all necessary sewer connection permits and pay all applicable fees. In light of the analysis contained above, the proposed project would not result in a determination by the existing wastewater provider that inadequate treatment capacity is available to serve the project. The proposed project will, however, require the installation of new project infrastructure to serve the proposed development. This infrastructure will be required to intertie with the City's existing wastewater distribution network. This would not result in a significant effect for the purposes of CEQA. **The project would have a less-than-significant impact on wastewater facilities.**

Solid Waste

The project would generate additional solid waste related to the operation and construction of the proposed project. All solid waste generated by project construction and operation would be disposed of at the American Avenue Landfill. The landfill has a maximum permitted disposal rate of 3,000 tons per day, an existing disposal rate of approximately 1,000 tons per day, and an estimated closing date of 2065 (personal communication, Heriberto Cantu, Principal Engineer, August 8, 2011). Table 4.13-10 identifies projected solid waste estimates associated with the proposed project. As shown below, the project is expected to generate approximately 8,785.80 pounds of solid waste per day. According to the City of Fresno, the City has an existing waste diversion rate of 56 percent; 3,865.75 pounds per day of solid waste would be disposed of at the American Avenue Landfill. The American Avenue Landfill has sufficient capacity to accommodate solid waste that would be generated by the project (personal communication, Heriberto Cantu, Principal Engineer, August 8, 2011). The proposed project, therefore, would not require the expansion or construction of new solid waste facilities to accommodate project demands. **Thus, the project would result in a less-than-significant impact on solid waste services.**

Use	Dwelling Units/Units	Daily Rate (lbs/day) ¹	Generation (lbs/day)	Annual Solid Waste (tons/year)
Commercial/Office	104,593	0.084	8,785.8	1,454.32
Source Estimates: 1. California Integrated Waste Management Board Estimated Solid Waste Generation Rates for Residential & Commercial Establishments; see also CIWMB Statewide Waste Characterization Study (2004), and CIWMB Waste Disposal and Diversion Findings for Selected Industry Groups (2006).				

Energy

According to Appendix F of the CEQA Guidelines, an EIR shall evaluate the potentially significant energy implications of a project. A project would have a significant and unavoidable adverse effect if it includes the wasteful, inefficient and unnecessary consumption of energy during project construction, operation, maintenance, and/or removal that cannot be feasibility mitigated. The proposed project would result in both direct and indirect energy consumption. Indirect energy consumption includes: 1) energy consumed by construction vehicles and energy used for construction materials, such as asphalt, steel, concrete, pipes and manufactured or processed materials, such as lumber and metal; and 2) energy consumption related to project land uses (i.e., vehicular traffic). Direct energy demands are associated with the on-site uses. The following analysis has been prepared in accordance with the recommendations contained in Appendix F of the CEQA Guidelines; both direct and indirect energy demands are quantified and mitigation measures are recommended to reduce the extent of this impact to a less-than-significant level.

Indirect Energy Consumption

The demolition of existing on-site structures and the subsequent construction of the proposed project, including project infrastructure, would result in indirect energy consumption due to construction traffic and the use of construction materials. The primary energy demand during construction would be associated with use of gasoline- and diesel-powered mobile construction equipment and use of automobiles to transport workers and materials to and from the construction site. Electricity would also be used for construction lighting, field services, and electrically driven construction devices such as air compressors, pumps and other equipment. The project would result in indirect energy consumption as a result of post-construction traffic (i.e., operational traffic). At this time, information regarding the type and quantity of building materials and construction electricity demand, in addition to anticipated construction-related traffic trips, is not known. Therefore, only indirect energy consumption related to operational vehicular traffic is quantifiable. Table 4.13-11 identifies projected indirect energy demand.

Although the proposed project would result in increased indirect energy consumption, the amount of transportation fuel and potential electricity use required for project operation is not considered an inefficient or wasteful use of energy. In addition, the proposed project itself would not cause individuals and/or site occupants to use their vehicles; vehicle use is a function of personal choice. Indirect energy use can be mitigated to the extent that project traffic can be reduced. Indirect energy use does not represent the wasteful, inefficient or unnecessary consumption of energy.

Source	Vehicle Miles Traveled (VMT) per Day ¹	Demand Factor (miles/gallon) ²	Energy Demand (gallons oil)
Operational Traffic	11,186.2	20.7	231,554.34
Source Estimations/Notes: 1. Actual VMT subject to variation depending upon actual vehicle fleet mix and construction duration. Figures only include on operational traffic trips under an unmitigated scenario. Data obtained from Air Quality and Greenhouse Gas Analysis. These data are rough estimates. 2. Energy Information Administration (EIA).			

Direct Energy Consumption

The proposed project would result in direct energy consumption associated with the use and occupancy of the proposed office complex. The project would require a considerable amount of additional electrical energy and natural gas as compared to site's existing energy consumption. Projected electricity and natural gas requirements for the proposed project are shown in Tables 4.13-12 and 4.13-13.

CEQA requires that an EIR evaluate the potential energy impacts of a project on existing energy resources to determine whether a project would necessitate the construction of new or expanded energy facilities. In 2008, total electricity consumption in the California was 287,782.1246 million kWh. Total energy consumption in Fresno County was 7,204.374595 million kWh. The proposed project would increase electricity demand on-site, and result in a total projected demand of 1,778.08 mWh. This demand does not represent a substantial increase in energy consumption necessitating the construction of new or expanded electrical facilities. Existing electricity generation capacity and supply systems can meet this increased demand; PG&E previously indicated that it has sufficient capacity to serve development of the site as evidenced in a "Can and Will Serve" letter dated May 13, 2008. Energy consumption to accommodate the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy. **This represents a less-than-significant impact.**

Use	Unit Measurement (sq. ft)	Demand Factor (kWh/year) ¹	Total Electricity Use (mWh/year) ¹
Commercial/Office ²	104,593	17.0	1,778.08 mWh/year
Source Estimations: Please note that these are rough estimates. Actual energy demand will likely vary. Estimates obtained from Residential Energy Use from California Statewide Residential Appliance Saturation Study, Tables 2-9, 2-13, 2-15, 2-4, 2-5, 2-23, 2-24 1). Estimates obtained from the Energy Information Administration. Demand factors are provided according to the type of use. 2). Demand factors are provided to use; please see EIA, 2003 Commercial Buildings Energy Consumption Survey.			

In 2008, total natural gas consumption in California was 1,299,444.072 million British thermal units (MMbtu). Total natural gas consumption in Fresno County in 2008 was 27,828,070.90 MMBtu. The proposed project would increase the demand for natural gas on-site. The project would result in a total projected demand of 3,451.57 MMBtu/year. This does not represent a substantial increase in energy consumption necessitating the construction of new or expanded natural gas facilities or represent the inefficient or wasteful use of energy. PG&E previously indicated that it has sufficient capacity to serve development of the site as evidenced in a "Can and Will Serve" letter dated May 13, 2008. Project generated natural gas consumption would not

result in the wasteful, inefficient, and unnecessary consumption of energy. **This represents a less-than-significant impact.**

Table 4.13-13			
Anticipated Daily Natural Gas Demand			
Use	Unit Measurement (sq. ft)	Demand Factor (MMBtu/unit/year) ¹	Total Natural Gas Use (MMBtu/residence/year) ¹
Commercial/Office ²	104,593	0.033	3,451.57 MMBtu/year
Source Estimations: Please note that these are rough estimates. Actual energy demand will likely vary. Estimates obtained from Residential Energy Use from California Statewide Residential Appliance Saturation Study, Tables 2-9, 2-13, 2-15, 2-4, 2-5, 2-23, 2-24 1). Estimates obtained from the Energy Information Administration (EIA). Demand factors are provided according to the type of use; please see EIA, 2003 Commercial Buildings Energy Consumption Survey.			

CEQA Guidelines Section 15126.4(a)(1)(c) and Appendix F of the CEQA Guidelines identifies that energy conservation measures should be identified within the context of an EIR when necessary to avoid the wasteful, inefficient or unnecessary use of energy. The proposed project would increase demands for electricity and natural gas beyond existing levels. In order to ensure that appropriate energy conservation measures are implemented, the City requires that all projects comply with the requirements of Title 24. This ensures that appropriate energy conservation measures are incorporated as part of the final project design. **The project would have a less-than-significant impact on energy demand; the following condition of approval would further ensure that impacts are further minimized in accordance with CEQA.**

- The project shall implement the sustainable strategies contained in the Fresno Green report to the extent they are applicable to the project. The proponent shall implement energy conservation measures, including, but not limited to, the following:
 - a. Final-design that takes advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. Project shall exceed Title 24 requirements by 20%.
 - b. Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
 - c. Install light colored cool pavements, and strategically placed shade trees. Plant shade trees within 40 feet of the south side or within 60 feet of the west side of buildings.
 - d. Install energy efficient heating and cooling systems, appliances and equipment, and control systems including:
 - smart meters and programmable thermostats
 - Heating, Ventilation, and Air Condition (HVAC) ducts sealing
 - e. Install light emitting diodes (LEDs) for outdoor lighting.
 - f. Provide electrically powered landscape equipment and outdoor electrical outlets.

Cumulative Impacts

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect may be cumulatively considerable. This EIR relies on a list approach, as described in Section 5.2 of this EIR. The geographic scope is the Bullard Community Plan area. Proposed development considered in the cumulative analysis is

identified in Table 5-1 (see Section 5.0 CEQA Considerations). The following provides a detailed evaluation of cumulative impacts for each of the respective issue areas discussed above.

Water

As discussed above, the projected water demands of the project are not expected to exceed the currently available water supply and reasonably foreseeable future water supplies based on the 2008 UWMP and the analysis contained in this EIR. Projected demands can be accommodated through the site's existing UWMP water demand projections and the implementation of the mitigation measures identified in this EIR. While development of the project itself would not necessitate the procurement of additional water supplies to meet project demands, cumulative development may, under a full buildout scenario, increase water demand for groundwater and surface water resources within the City of Fresno's Water Division service boundaries. These increased demands, however, have been accommodated in the 2008 UWMP. The project's water is substantially lower than would be required by the uses projected in the 2008 UWMP; the project, therefore, does not constitute a cumulatively considerable significant impact on existing water supplies when combined with the effects of other relevant projects. **The project would have a less-than-significant cumulative impact on existing water supplies.**

Wastewater

According to the City of Fresno, the Fresno-Clovis Regional Wastewater Treatment Facility has a design capacity of 88 mgd with current flows that average 66 mgd. The proposed project in combination with other cumulative development would incrementally increase demand for wastewater services. The City of Fresno Wastewater Management Division has indicated that there is sufficient capacity to accommodate the proposed project in addition to other developments. The increased demand for wastewater services, however, is not anticipated to exceed existing treatment capacity. Moreover, the City of Fresno has indicated that they are currently considering expanding wastewater treatment capacity in the future in order to accommodate buildout under the 2025 General Plan. The proposed project, in addition to the cumulative projects considered in this EIR, would not necessitate the expansion of treatment capacity.

Regarding cumulative impacts on the wastewater collection system, the timing and scale of cumulative buildout will influence the need for infrastructure improvements throughout the project area. The adequacy of the collection systems is evaluated intermittently on a project-by-project basis and infrastructure improvements are implemented as necessary to meet the required demand of existing and new wastewater generators. As discussed above, implementation of project-specific mitigation measures would ensure that system capacity is adequate to meet project demands. Based on the anticipated wastewater flow associated with the proposed project, the existing sanitary sewer system would not be significantly impacted by buildout of the proposed project and other cumulative development. **The project's incremental impacts on existing wastewater facilities it not considered cumulatively considerable when combined with other relevant projects; this represents a less-than-significant impact.**

Solid Waste

Solid waste generated within the cumulative development scenario area is collected and disposed of at the American Avenue Landfill. The landfill has a maximum permitted disposal rate of 3,000 tons per day, an existing disposal rate of approximately 1,000 tons per day, and an estimated closing date of 2065. Project buildout, in addition to other cumulative developments would generate a nominal amount of solid waste. Sufficient capacity exists to accommodate

development under the cumulative scenario; therefore, potential development would have a less-than-significant cumulative impact on solid waste disposal services. **The project's incremental impacts on existing solid waste facilities is not cumulatively considerable and the cumulative impacts to solid waste facilities is therefore considered less-than-significant.**

Energy

Development of the proposed project, in conjunction with other cumulative development, would result in an increased demand for electricity and natural gas supplies. As identified above, the incremental increase in electrical and natural gas demand associated with the proposed project would represent an insignificant increase in natural gas and electricity consumption in the region. Development of the proposed project in combination with other regional developments would not significantly impact the existing natural gas system such that existing services would be disrupted and/or otherwise impacted. At the time of this EIR, PG&E has indicated that sufficient capacity is available to serve the proposed development as described above. As a result, development of the cumulative projects would not result in a cumulatively considerable impact in regard to energy consumption.

While the project would not contribute significantly to increased demands, development of the proposed project would result in the permanent commitment of a non-renewable resource. Increased demand for energy sources has the potential to contribute to global warming and result in secondary impacts as discussed elsewhere in this EIR. Mitigation measures have been identified above to reduce the extent of project-induced impacts due to increased energy use. These mitigation measures have been incorporated in order to ensure that project-generated energy demands would not result in the wasteful, inefficient, and unnecessary demand for energy. The proposed project, as mitigated, would incorporate measures to ensure that project development does not result in the wasteful use of energy. **The project would incrementally increase demands on energy supplies. The project's incremental impacts are not considered cumulatively considerable when combined with other relevant projects. The project would have a less-than-significant cumulative impact on energy supplies.**

5.0 CEQA Considerations

5.1 GROWTH INDUCEMENT

CEQA requires that an EIR discuss the ways in which the proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Section 15126.2(d)). Included in this evaluation are elements of the project that would remove obstacles to population growth, such as unavailability of major utility capacity or infrastructure. Recognizing the inherent difficulties involved in forecasting the extent and type of development that might be fostered by a particular project, CEQA calls for a general assessment of possible growth-inducing impacts rather than a detailed analysis of a project's specific impacts on growth.

Growth inducement may be considered detrimental, beneficial, or insignificant under CEQA. Typically, induced growth is considered a significant adverse impact if it:

- Provides infrastructure or capacity to accommodate growth beyond the levels currently permitted in applicable local and regional plans and policies.
- Encourages growth or a concentration of population in excess of what is planned for in the applicable general plan or other land use plan, or in projections made by regional planning agencies.
- Adversely affects the ability of agencies to provide needed public services or infrastructure.
- In some other way significantly affects the environment, such as through a substantial increase in traffic congestion or deterioration of air quality.

Potential Growth Related to the Project

The project would result in the development of a 104,593 square-foot commercial office building. This could support up to 400 potential employees. While the project would potentially provide additional sources of employment for these employees, the project is not anticipated to induce substantial new population growth since at least some of these workers are anticipated to be relocating from elsewhere in the City. Any increase in job potential would be considered beneficial given the current jobs deficit during this current economic downturn.

The project site is located within the City of Fresno and would not result in an expansion of urban services or the pressure to expand beyond the City's existing Sphere of Influence. It would not open additional undeveloped land to future growth or provide expanded utility capacity to serve future development. Instead, it would facilitate the commercial office development in an existing urban setting that is provided with urban services.

The scale of employment growth would not constitute significant or adverse growth inducement. The project would provide new infrastructure in the City of Fresno, including lateral extensions of water, storm, and sanitary sewer lines. The proposed utilities and related infrastructure would be planned and sized to accommodate the project's requirements, and would not include oversized components designed to facilitate other development or further extensions of utilities or services. Adequate infrastructure and public services are generally available to meet the increased demands of the project. No significant additional impacts on services (such as water, wastewater, storm drainage, flood control, police, fire, parks and recreation) are expected beyond what has

been planned for by the proposed project. The additional infrastructure for the project does not exceed what is necessary to mitigate impacts of the project, and will not provide additional capacity to accommodate significant growth.

Finally, the project does not allow for development that creates population or other growth beyond what is currently permitted under the City of Fresno and Fresno County General Plans.

Based upon the above discussion, the project would not result in significant growth-inducing impacts.

5.2 CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect is cumulatively considerable. Cumulative impacts refer to two or more individual affects that, when combined, are considerable or that compound or increase other environmental impacts. The purpose of the cumulative impact analysis is to identify and summarize the environmental impacts of the proposed project in conjunction with existing, approved, and anticipated development in the project area. Cumulative impacts associated with the project are addressed within the respective sections of this EIR.

The cumulative analysis relies on a list approach, encompassing other pending relevant developments in the general project area. This list was compiled based on data provided in recent EIRs prepared for proposed development within the larger Bullard community area, based on direction from City staff.¹ These projects are identified in Table 5-1 below. The geographic scope for the cumulative analysis is within a few miles of the project site, except as noted in each EIR section. For example, the quality analysis considers cumulative impacts on a regional basis comprising the entire air basin.

Project Name	Location	Description
Bullard High Improvements Project	5445 N. Palm Ave	education/athletic facility improvements
Fairfield Inn by Marriott	1710 W. Shaw Ave	87-room hotel
El Paseo - Phase I	Near Herndon and Bullard	660,000 s.f. retail
Commercial Center	Palm and Shaw (NW corner)	Walgreens (15,500 s.f.) and 8,300 s.f. retail
North Wal-Mart Expansion	Herndon and Ingram	40,000 s.f. retail expansion
A-11-04/R-11-04/C-11-58	Barstow and Maroa	26 multi-family units
A-11-08/R-11-011	Palm and Nees	mixed use development: 180 residential units with incidental office

¹ *Draft Fresno El Paso Environmental Impact Report*, City of Fresno, May 2010; *Final Environmental Impact Report for the Bullard High School Improvements Project*, Fresno Unified School District, April 2010.

5.3 SIGNIFICANT UNAVOIDABLE IMPACTS

The proposed project would result in significant impacts in the following categories, as described in this EIR: aesthetics, biological resources, cultural resources, geology, hazards, water quality, noise, public services, traffic, and utilities. All project impacts can be reduced to a less-than-significant level with implementation of mitigation identified in this EIR, with the exception of the following:

- Significant unavoidable visual impacts

5.4 IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126(f) of the State CEQA Guidelines requires EIRs to include a discussion of significant, irreversible environmental changes that would result from project implementation. CEQA Section 15126.2(c) identifies irreversible environmental changes as those involving a large commitment of nonrenewable resources or irreversible damage resulting from environmental accidents.

The project would develop commercial office uses on the site. Irreversible changes associated with the project include the use of nonrenewable resources during construction, including building materials (such as concrete, glass, some types of plastic) and use of petroleum products. During the operational phase of the project, natural gas and electricity would be used for lighting, cooling, and heating. The project would also commit the site to commercial office uses for the foreseeable future.

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6.0 Alternatives

6.1 INTRODUCTION

CEQA Guidelines §15126.6 requires the consideration of a range of reasonable alternatives to the proposed project that could feasibly attain most of the basic objectives of the proposed project. The Guidelines further require that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a less-than-significant level, even if the alternative would not fully attain the project objectives or would be more costly. According to CEQA Guidelines, the range of alternatives required in an EIR is governed by the “rule of reason” that requires an EIR to evaluate only those alternatives necessary to permit a reasoned choice. An EIR need not consider alternatives that have effects that cannot be reasonably ascertained and/or are remote and speculative.

Alternatives Considered but Rejected

The following discussion has been prepared in accordance with the requirements of CEQA Guidelines §15126.6(c), which requires that an EIR identify alternatives that were considered by the lead agency but not chosen for further evaluation. The following project alternatives were not considered for further evaluation because they failed to achieve the project objective or would result in additional significant impacts.

Alternative Location. CEQA Guidelines §15126.6(f)(2) provides direction on what types of project alternatives should be evaluated. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project. The EIR shall then evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

In considering whether an alternative would feasibly attain most of the basic objectives of the project, one relevant consideration is whether a property is owned or can be reasonably acquired by the project proponent, as that circumstance has a strong bearing on the likelihood of a project's ultimate cost and the chances for expeditious and successful accomplishment, i.e. whether it is a feasible alternative. In addition, the basic objectives of the project must be a touchstone for selecting a reasonable alternative. In this instance, several of the basic project objectives are associated with the specific location/site of the proposed project. Specifically, as detailed in Section 3.2 of this EIR, the project objectives are as follows:

- The underlying purpose of the project is to replace an aged former two-story apartment complex structure with a four story office structure developed in a style consistent with the three existing adjacent office facilities that comprise the Fig Garden Financial Center, at a scale that is economic to develop, lease, and manage.
- Develop the project site in a fashion that takes advantage of the site's strategic location as a primary location for activity centers within plan areas.

- Assist in the General Plan's goal of developing urban design strategies to improve Fresno's visual image and enhance its form and function.
- Provide an in-fill commercial office use that is strategically located to ensure accessibility and convenience its service population, while minimizing travel requirements, infrastructure demands, and adverse effects.
- Develop the subject site in a manner that provides an effective transition between more intensive commercial uses and adjacent sensitive residential areas.

Consideration of an alternative site for the proposed project would fail to achieve the objective to redevelop the site of a former aged apartment complex. It would also fail to take advantage of the site's strategic location as a primary property for an activity center. Further, the project applicant does not own, control, or have the ability to acquire an alternative site in the immediate vicinity of the existing Fig Garden commercial center. Based on these circumstances, this EIR does not include consideration of an off-site alternative and, rather, focuses on alternative types and scales of development on the proposed project site.

Mixed Commercial/Residential Use Alternative. This alternative consists of constructing a mixed commercial/residential project to achieve a vertically mixed use development. This would consist of ground-floor commercial uses with residential uses above. The commercial component would generate additional traffic impacts associated with site access and higher traffic volumes. Commercial uses would also increase activity levels and associated noise and other land use conflicts. This alternative was rejected from further consideration since it would not reduce the identified significant impacts of the proposed project and has the potential to result in additional adverse impacts.

Alternatives Selected for Further Analysis

The following section discusses the alternatives evaluated in this EIR and the comparative environmental effects of each. The alternatives considered in this analysis are as follows:

- No Project
- Existing General Plan
- Reduced/Modified Project
- Mixed Use/Residential Project

The alternatives chosen for this analysis, beyond those mandated by CEQA, were developed to avoid or substantially reduce the significant impacts of the project. A comparison of the impacts for each alternative is presented in Table 6-1. For those areas where the impacts are not reduced or changed from those of the proposed project, the analysis is abbreviated.

Impact	No Project	Existing General Plan	Reduced/ Modified Project	Mixed Use/Residential
Aesthetics	<	<	<	>
Agricultural Resources	<	=	=	=
Air Quality	<	<	<	>
Biological Resources	<	=	=	=
Cultural Resources	<	=	=	>
Geology	<	=	=	=
Hazards & Hazardous Materials	<	=	=	=
Hydrology & Water Quality	<	=	=	=
Land Use & Planning	<	<	<	>
Noise	<	>	<	>
Public Services & Utilities	<	>	<	>
Traffic	<	<	<	>
> Impact Greater than Project = Impact Comparable to Project < Impact Less than Project				

6.2 SUMMARY OF PROJECT OBJECTIVES AND SIGNIFICANT IMPACTS

Objectives

The primary objectives of the project are described in 3.0 Project Description of this EIR and listed above in Section 6.1.

Significant Impacts

The proposed project would result in significant impacts in the following categories, as described in this EIR: aesthetics, biological resources, cultural resources, geology, hazards, water quality, noise, public services, traffic, and utilities. All project impacts can be reduced to a less-than-significant level with implementation of mitigation identified in this EIR, with the exception of the following: significant unavoidable visual/aesthetic impacts.

6.3 NO PROJECT ALTERNATIVE

CEQA §15126.6(e) requires the discussion of the No Project Alternative “to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.” The No Project Alternative is the circumstance where the project does not proceed, and the analysis compares the proposed project to the property remaining in its existing state. This would normally be a no build scenario, except where the analysis demonstrates that failure to proceed with the project would result in predictable actions by the applicant or others, in which case the consequences of those actions should be discussed. It is expected that the site would be developed in the foreseeable future by the applicant or others in a manner consistent with existing density requirements, utilizing available infrastructure and public services. This future development scenario is evaluated below under the Existing General Plan Alternative.

6.4 EXISTING GENERAL PLAN ALTERNATIVE

Description

The project site is currently designated *Medium Low Density Residential (2.19-6.0 dwelling units/acre)* on approximately 2.34 acres and *Medium High Density Residential (10.38-18.15 dwelling units/acre)* on the remaining 2.35 acres. This alternative assumes buildout of the existing General Plan land use designations for the property. Under this scenario, the General Plan and Bullard Community Plan would not be amended and the project site would retain its current land use designations of *Medium Low Density Residential (2.19-6.0 dwelling units/acre)* on approximately 2.34 acres and *Medium High Density Residential (10.38-18.15 dwelling units/acre)* on 2.35 acres. This would result in the development of a maximum of 57 residential units (\pm 14 single family units and 43 multi-family units) on the 4.69-acre project property.

Impacts

Aesthetics. This alternative would result in less intensive development of the project site than the proposed project, since the existing General Plan designations are less dense. Buildout of the existing designations would avoid construction of the larger, four-story building currently proposed by the project and also avoid the unmitigable visual/aesthetic impacts associated with the proposed project. The aesthetic/visual impacts of the Existing General Plan Alternative would be substantially less than those of the proposed project.

Agricultural & Forest Resources. The existing General Plan map does not preserve any portion of the project site in agricultural use, nor does it contain forest/timber resources. The impacts to agricultural and forest resources would be less than significant for both the project and this alternative.

Air Quality/Greenhouse Gas. Because development under this alternative would be less intensive than the proposed project, construction and operation of this alternative could lower emissions of air pollutants including greenhouse gases compared to the project; however, the air quality and greenhouse gas emissions from the proposed project are not identified as significant.

Biological Resources. The project could remove up to 100 existing trees on the site and may impact special-status species, including nesting raptors. The development of 57 units on the project site may allow more flexibility in design resulting in the preservation of more trees. However, it is assumed that under the existing General Plan designation, most of the 4.69-acre site would still be disturbed by development. Mitigation is available for both the project and the Existing General Plan Alternative to reduce impacts to biological resources to a less-than-significant level. The overall impacts of the Existing General Plan Alternative to biological resources would be comparable to or slightly less than those of the proposed project.

Cultural Resources. Since it is assumed that under the existing General Plan designation that most of the 4.69-acre project site would be disturbed by development, the potential impact on undiscovered cultural (archaeological) resources would be similar to the proposed project. The overall impacts to cultural resources from the Existing General Plan Alternative would be approximately equal to those of the proposed project.

Geology. This alternative would likely reduce grading, since it is improbable that underground basements or garages would be required for the 57 residential units. The site would be subject to the same seismic hazards under either development scenario. However, because this alternative involves residential rather than office uses, permanent residents would be exposed to existing

seismic hazards rather than daytime tenants. For both the proposed project and this alternative, the geology impacts would be mitigated to less-than-significant levels. The overall impacts related to geology from the Existing General Plan Alternative would be similar to those of the proposed project.

Hazards. For both the proposed project and this alternative, the potential release of hazardous materials could occur during demolition and construction activities. However, mitigation is available to reduce this impact to a less-than-significant level for both scenarios. The overall impacts relating to hazards and hazardous materials from the Existing General Plan Alternative would be approximately equal to those of the proposed project.

Hydrology/Water Quality. Development under this alternative would be subject to local regulations that require all storm water runoff to be retained onsite. This alternative may reduce impervious surfaces due to the decrease in development intensity, and therefore could decrease the potential for water quality impacts compared to the proposed project. However, for both the proposed project and this alternative, water quality impacts would be avoided by implementation of required BMPs. The overall hydrology and water quality impacts of the Existing General Plan Alternative would be approximately equal to those of the proposed project.

Land Use. The Existing General Plan Alternative would be consistent with the current General Plan and Bullard Community Plan land use designations for the project site. Development of this alternative would avoid potential land use compatibility issues associated with placing more intense office uses in a relatively low density community. This alternative would avoid potential inconsistencies with General Plan and Community Plan policies calling for the development of complementary uses that do not conflict with existing residential neighborhoods. The adverse land use effects of the Existing General Plan Alternative would be less than those of the proposed project since the intensity of uses would be consistent with existing policy.

Noise. Construction noise impacts from this alternative may be reduced under this alternative since it would avoid the development of the large office structure, which will require substantial excavation and construction. Construction noise could be less intensive under the Existing General Plan Alternative since it would allow fewer, smaller structures, depending on the construction phasing for the residential uses. During project operations, the Existing General Plan Alternative may be somewhat noisier than the proposed office uses, which are generally confined to the indoors with few outdoor sources excluding ventilation fans. Residential uses would likely introduce new traffic directly into the neighborhood, unlike the project which is directing traffic through the Financial Center. Residential uses would also include outdoor use areas that could generate noise (i.e., from barbeque areas, swimming pools, tennis courts, etc.). Overall, the noise impacts of the Existing General Plan Alternative would be similar to or somewhat greater than the proposed project.

Public Services & Utilities. Buildout under the existing General Plan designation would significantly increase the demand for public services and utilities as compared to the project. In particular, residential development is anticipated to increase demands for interior and exterior water use, as well as police protection services as compared to the project. The 2008 UWMP identified that residential use of the subject property would result in a water demand substantially higher than an office/commercial use. Project generated demands are anticipated to be substantially less. For both the proposed project and this alternative, public services and utilities impacts would be reduced to a less-than-significant level with mitigation. The overall public services and utilities impacts of the Existing General Plan Alternative would be greater than those of the proposed project in terms of water use; similar mitigation measures would be required under the Existing General Plan Alternative.

Traffic. This alternative would reduce vehicle trips to the project site by about 50 percent. The traffic effects of the Existing General Plan Alternative would be less than those of the proposed project since this alternative involves substantially less development. This alternative would reduce the project's contribution to traffic under cumulative (2030) conditions; however, the traffic impacts of the project would be mitigated to less-than-significant by payment of established traffic impact fees. The traffic impacts of the Existing General Plan Alternative would be less than those of the proposed project. However, the residential uses would take access directly from the roadways within the immediate vicinity, whereas the project proposes to provide all vehicular access through the adjacent Financial Center. This could result in a perceived increase in traffic in the immediate neighborhood under the Existing General Plan Alternative.

Summary

Because of its significantly reduced development intensity, the Existing General Plan Alternative would result in reduced environmental impacts compared to the proposed project. This alternative would eliminate the project's significant unavoidable visual impacts and would reduce the overall impacts from development including additional traffic, air pollution, and land use. This alternative is, however, anticipated to result in a significant demand for public services and utilities as compared to the project. This alternative would not meet the project objectives of providing a commercial office building on the site adjacent to the Fig Garden Financial Center, nor take advantage of the site's strategic location near an activity center.

6.5 REDUCED/MODIFIED PROJECT ALTERNATIVE

Description

This alternative consists of reducing development on the project site to avoid the proposed project's significant unmitigable visual impacts while retaining the office use. The Reduced Project alternative consists of reducing development on the site by 50%, resulting in the construction of approximately 53,000 square feet of office uses in a two-story structure. This would likely avoid the need for the underground parking garage, since the parking demand would be reduced by half and could likely be accommodated by a surface lot.

Impacts

Aesthetics. This alternative would avoid the significant unavoidable visual/aesthetic impact of the project by replacing the proposed four-story building with a two-story structure. This alternative would still alter the existing visual character of the site, but would reduce the effect by lowering the height of the building by half, consistent with the surrounding uses to the south. The overall impacts of the Reduced Project Alternative to aesthetics would be substantially less than those of the proposed project.

Agricultural & Forest Resources. The project site does not contain agricultural or timber/forest resources. The impacts to agricultural and forest resources would be less than significant for both the project and this alternative.

Air Quality/Greenhouse Gas. Because development under this alternative would be less intensive than the proposed project, construction and operation of this alternative could lower emissions of air pollutants including greenhouse gases compared to the project; however, the air quality and greenhouse gas emissions from the proposed project are not identified as significant.

Biological Resources. The project could remove up to 100 existing trees on the site and may impact special status species, including nesting raptors. The development of this alternative on the site is likely to result in similar impacts, since the footprint would be relatively unchanged. Mitigation is available for both the project and the Reduced Alternative to reduce impacts to biological resources to a less-than-significant level. The overall impacts of the Reduced Project Alternative to biological resources would be comparable to those of the proposed project.

Cultural Resources. Since it is assumed that most of the 4.69-acre project site would be disturbed by development under the Reduced Alternative, the potential impact on undiscovered cultural (archaeological) resources would be similar. The overall impacts to cultural resources from this alternative would be approximately equal to those of the proposed project.

Geology. The project site would be subject to the same seismic hazards under the project and Reduced Alternative development scenario. However, because the site would be occupied by fewer tenants under this alternative, fewer persons would be exposed to these seismic hazards. For both the proposed project and this alternative, the geology impacts would be mitigable to less-than-significant levels. The overall impacts related to geology from the Reduced Project Alternative would be less than those of the proposed project, since it would accommodate fewer occupants.

Hazards. For both the proposed project and this alternative, the potential release of hazardous materials could occur during demolition and construction activities. However, mitigation is available to reduce this impact to a less-than-significant level for both scenarios. The overall impacts relating to hazards and hazardous materials from the Reduced Project Alternative would be approximately equal to those of the proposed project.

Hydrology/Water Quality. Development under this alternative would be subject to local regulations that require all storm water runoff to be retained onsite. This alternative is expected to result in site coverage comparable to the proposed project, since the development footprint would be relatively unchanged. For both the proposed project and this alternative, water quality impacts would be avoided by implementation of standard BMPs and erosion control practices. The overall hydrology and water quality impacts of the Reduced Project Alternative would be approximately equal to those of the proposed project.

Land Use. The Reduced Project Alternative would be more consistent with the policies of the current General Plan and Bullard Community Plan land use policies than the project, by reducing the building height and square footage. Development of this alternative could reduce or avoid potential land use conflicts from introducing a four-story commercial office building into a relatively low density area. This alternative would also avoid potential inconsistencies with General Plan and Community Plan policies calling for the development of that is compatible with existing neighborhoods. The adverse land use impacts of the Reduced Project Alternative would be less than those of the proposed project by reducing the overall intensity of development on the site.

Noise. Construction noise impacts from the Reduced Project Alternative would likely be comparable to the proposed project, since it would require substantial grading and other activities to build the two-story office building. However, due to its reduced size, the duration of construction impacts would be decreased. During project operations, this alternative would have similar noise impacts as the project. Overall, the noise impacts of the Reduced Project Alternative would be less comparable or slightly less than those of the proposed project, if the need for the parking garage and associated ventilation fans was eliminated.

Public Services & Utilities. The Reduced Project Alternative would decrease the square footage of the office building by 50%, resulting in a corresponding decrease in the demand for services and

utilities. In particular, this alternative would reduce demands on water services, which are already constrained. For both the proposed project and this alternative, public services and utilities impacts could be reduced to a less-than-significant level through the incorporation of mitigation. The overall public services and utilities impacts of the Reduced Project Alternative would be less than those of the proposed project, and this alternative would not require as much mitigation as the proposed project.

Traffic. This alternative would avoid the traffic impacts of the project by reducing vehicle trips by up to 50 percent. The traffic impacts of the Reduced Project Alternative would be less than those of the proposed project since this alternative involves less development. This alternative would reduce the project's contribution to traffic under cumulative (2030) conditions; however, the traffic impacts of the project would be mitigated to less-than-significant by payment of established traffic impact fees. The traffic effects of the Reduced Project Alternative would be less than those of the proposed project.

Summary

Due to the reduced intensity of this alternative, including 50% less square footage and reduction of the proposed office structure to two stories, the Reduced Project Alternative would reduce environmental impacts compared to the proposed project. This alternative would eliminate the project's significant unavoidable visual impacts. This alternative, however, would not meet the project objectives of providing a higher density office uses comparable to the existing office buildings in the Fig Garden Financial Center.

6.6 MIXED USE/RESIDENTIAL PROJECT

Description

This alternative consists of the previously proposed mixed use development on the site. This alternative would incorporate the existing Fig Garden Financial Center into a horizontally mixed-use development that includes a new four to six-story, 305-unit residential building. The new residential building would be located on the proposed project site and an additional parcel to the east, totaling about 4.69 acres. This alternative also includes an approximately 0.73 acres of common open space.

Impacts

Aesthetics. The Mixed Use alternative would result in significant unavoidable visual/aesthetic impacts by introducing a new four- to six-story residential building adjacent into an existing low-scale residential area with minimal setbacks. The proposed project would also result in significant unavoidable visual impacts; however, the office development includes larger setbacks and a consistent, less imposing elevation of four-stories.

Agricultural & Forest Resources. The project site does not contain agricultural or timber/forest resources. The impacts to agricultural and forest resources would be less-than-significant for both the project and this alternative.

Air Quality/Greenhouse Gas. Because development under this alternative would be more intensive than the proposed office building, operation of this alternative could increase emissions of air pollutants including greenhouse gases compared to the project. In addition, the Mixed Use project would be phased and have a longer construction period, resulting in greater air pollutant and greenhouse gas emissions during construction. Although the project would somewhat reduce

emissions compared to the Mixed Use Alternative, the air quality and greenhouse gas emissions from the proposed project are not identified as significant.

Biological Resources. The Mixed Use Alternative would disturb approximately one additional acre of land compared with the proposed project. Both the project and this alternative could remove up to 100 existing trees on the site and may impact special-status species, including nesting raptors. Mitigation is available for both the project and the Mixed Use Alternative to reduce impacts to biological resources to a less-than-significant level. The overall impacts of the Mixed Use Alternative to biological resources would be comparable to or slightly more than those of the proposed project.

Cultural Resources. The Mixed Use Alternative would disturb approximately one additional acre of land compared with the proposed project. Therefore, the potential impact on undiscovered cultural (archaeological) resources would be somewhat higher compared to the proposed project. The overall impacts to cultural resources from the Mixed Use Alternative would be slightly higher than those of the proposed project.

Geology. The Mixed Use Alternative would disturb approximately one additional acre of land compared with the proposed project, which may require more grading and earthwork. However, the site would be subject to the same seismic hazards under the proposed project and this alternative. For both the proposed project and this alternative, the geology impacts can be mitigated to less-than-significant levels. The overall impacts related to geology from this alternative would be comparable to those of the proposed project.

Hazards. For both the proposed project and this alternative, the potential release of hazardous materials could occur during demolition and construction activities. However, mitigation is available to reduce this impact to a less-than-significant level for both scenarios. The overall impacts relating to hazards and hazardous materials from this Alternative would be approximately equal to those of the proposed project.

Hydrology/Water Quality. Development under this alternative would be subject to local regulations that require all storm water runoff to be retained onsite. For both the proposed project and this alternative, water quality impacts would be avoided by implementation of required BMPs. The overall hydrology and water quality impacts of this alternative would be approximately equal to those of the proposed project.

Land Use. The Mixed Use Alternative would be inconsistent with the current General Plan and Bullard Community Plan land use designations for the project site and would introduce land use compatibility issues associated with placing high density residential uses in a relatively low density community. The office uses are consistent with adjacent commercial and office uses, although the height and intensity of development could potentially create land use conflicts with the low scale residential neighborhoods to the north and east.

Noise. Construction noise impacts from the Mixed Use Alternative would likely be comparable to the proposed project, since both would require substantial grading and building activities. Given the larger scale of the Mixed Use Alternative, the intensity and duration of construction-related impacts are anticipated to be greater than the proposed project. Operational noise associated with the high density residential component of the Mixed Use would be similar to the proposed project would be greater, due to the use of outdoor areas including the 0.73 acre park. Other noise sources (e.g., ventilation fans for the garage) would be similar to the project. Overall, the noise impacts of the Mixed Use Alternative would be greater than those of the proposed project.

Public Services & Utilities. Buildout of the Mixed Use Alternative would increase the demand for services and utilities by replacing the approximately 106,000 square foot office building with 305 residential units. In particular, this alternative would increase demands on water services, which are already constrained. For both the proposed project and this alternative, public services and utilities impacts would be reduced to a less-than-significant level with mitigation. However, additional mitigation measures would be required under the Mixed Use Alternative than the proposed project.

Traffic. The Mixed Use Alternative would result in an increase in vehicle trips compared to the proposed project, increasing the number of traffic impacts. This would also result in an increase the alternative's contribution to traffic under cumulative (2030) conditions. The traffic impacts of the Mixed Use Alternative and proposed project, however, would be mitigated to less-than-significant by the payment of established traffic impact fees. The traffic impacts of the Mixed Use Alternative would be greater than those of the proposed project.

Summary

Due to its increased development density, the Mixed Use Alternative would result in an increase in environmental impacts compared to the proposed project. This alternative would result in significant unavoidable visual impacts from the construction of a four to six-story residential building and would increase the overall impacts from development including additional traffic, air pollution, and public service demands. This alternative would not meet the project objectives of providing a commercial office building on the site adjacent to the Fig Garden Financial Center.

6.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines §15126.6 requires that an environmentally superior alternative to the proposed project be specified, if one is identified. In general, the environmentally superior alternative is intended to minimize adverse impacts to the project site and surrounding environment while achieving the basic objectives of the project. The No Project scenario for this project is the Existing General Plan Alternative, since the project site is not expected to remain in its current condition (i.e., abandoned apartment complex) for the foreseeable future. Because of its reduced development intensity, the Existing General Plan Alternative would result in reduced environmental impacts in most areas compared to the proposed project. This includes elimination of the project's significant unavoidable visual impacts and avoidance of potential land use compatibility issues. However, this alternative would not meet the project's primary objective of developing office uses on the site.

The Reduced Alternative would decrease environmental impacts in most areas compared to the proposed project and would eliminate the project's significant unavoidable impacts to aesthetics/visual quality, while still meeting the basic objective of the project to develop office uses adjacent to the existing Fig Garden Financial Center. Based on the analysis above, the Reduced Alternative would be the environmentally superior alternative since it would eliminate the project's significant visual impacts, avoid potential land use compatibility issues, and lessen overall environmental impacts.

7.0 References

7.1 REPORT PREPARATION

LEAD AGENCY

City of Fresno Development and Resource Management Department

Mike Sanchez, Planning Manager

DENISE DUFFY & ASSOCIATES, INC.

EIR Preparers

Denise Duffy, President

Leianne Humble, Project Manager

Tyler Potter, Associate Planner

Matt Johnson, Environmental Scientist

Jami Davis, Graphics

Alison Sprecher, Administration

7.2 PERSONS AND AGENCIES CONTACTED

Donald Ballanti, Certified Meteorologist

Captain Belluomini, City of Fresno Police Department

Bob Brown, Brown-Buntin Associates

Heriberto Cantu, County of Fresno, Department of Public Works & Planning Resources Division

Dina Clayton, Fresno Unified School District

Kevin Fabino, City of Fresno Development and Resource Management Department

Wally Hutcheson, TPG Consulting

Rosa Lau-Staggs, City of Fresno Wastewater Management Division

Scott Mommer, Lars Andersen & Associates

Jeff Reid, McCormick, Barstow, Sheppard, Wayte & Carruth, LLP

Mike Sanchez, City of Fresno Development and Resource Management Department

Mike Schmidt, Fire Prevention Inspector Supervisor, City of Fresno Fire Department

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