



San Ramon City Center Draft Subsequent EIR

State Clearinghouse Number 2007042022



Prepared for:



City of San Ramon

Planning/Community Development Department
Planning Services Division

2222 Camino Ramon
San Ramon, CA 94583

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August 13, 2007

DRAFT

Subsequent Environmental Impact Report
San Ramon City Center
San Ramon, Contra Costa County, California
State Clearinghouse Number 2007042022

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SECTION 1: INTRODUCTION

1.1 - Overview, Purpose, and Authority of the EIR

This Draft Subsequent Environmental Impact Report (DSEIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the San Ramon City Center Project (State Clearinghouse No. 2007042022). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.), and the City of San Ramon rules and regulations. This DSEIR is intended to serve as an informational document for the public agency decision makers and the public regarding the San Ramon City Center Project.

The purpose of an EIR is to disclose information to the public and to decision makers about the potential environmental effects of a proposed project. An EIR does not recommend either approval or denial of a proposed project; rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This DSEIR describes the proposed project, analyzes its environmental effects, and discusses reasonable alternatives that would avoid, reduce, or minimize environmental impacts.

The City of San Ramon is the lead agency for the proposed project. The San Ramon City Council will consider the information presented in this document in making an informed decision regarding the approval, conditions of approval, or denial of the proposed project.

This document is a Subsequent EIR to the City of San Ramon General Plan EIR and the City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006. The DSEIR is intended to serve as an informational document for the public agency decision makers and the public regarding the San Ramon City Center Project.

Overview

The proposed project consists of the new construction of approximately 2.1 million square feet of retail, hotel, residential, office, and civic uses on approximately 44 acres. As part of this project, 194,652 square feet of existing office space will be demolished, and the project will utilize a vested un-built office entitlement of 328,220 square feet. As a result, the basis for environmental analysis is approximately 1.6 million “net” square feet above the existing vested entitlements for the site and approximately 1.9 million square feet of net additional construction beyond the existing property conditions. Specific project elements include approximately: 635,000 square feet of retail and cinema uses, a 169-room hotel, up to 487 residential dwelling units, 680,000 square feet of office space,

50,000 square feet of retail/flex uses, and a 110,000-square-foot City Hall, including Council chambers, library, and Police Department headquarters. In addition, the project includes nine parking structures totaling more than 6,600 new spaces, one future reserve parking structure with 513 spaces, and the construction of a new Transit Center. The project square footage is summarized in Table 3-4: Project Components.

Purpose and Authority

This DSEIR provides a project-level analysis of the environmental effects of the proposed project. The environmental impacts of the proposed project are analyzed in the DSEIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146 and Section 15162. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Effects Found Not To Be Significant
- Areas of Known Controversy

1.1.1 - Lead Agency Determination

The City of San Ramon is designated as the lead agency for the project. CEQA Guidelines Section 15367 defines the lead agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a project.” Other public agencies may use this DSEIR in the decision-making or permit process and consider the information in this DSEIR along with other information that may be presented during the CEQA process.

This DSEIR was prepared by a consultant, Michael Brandman Associates, under contract to the City. This DSEIR reflects the independent judgment and analysis of the City as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Sections 8 and 9 of this DSEIR, respectively.

1.1.2 - Tiering and Basis for Subsequent EIR

The purpose of this DSEIR is to provide project-level subsequent environmental impact analysis that accurately analyzes the proposed project in light of current conditions, circumstances, and new information that was not available and not analyzed in previously certified environmental documentation or addendums to those documents. The DSEIR contains a description of the project, description of the environmental setting, identification of the project impacts and cumulative impacts, and mitigation measures to reduce project impacts, as well as an analysis of alternatives to the project. This project-level DSEIR, where applicable, tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR (State Clearinghouse No. 2000082002) and the San Ramon City Civic Center EIR (State Clearinghouse No. 2003072022), certified by the San Ramon City Council in 2001 and 2003, respectively.

This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration (State Clearinghouse No. 2005122094) and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006. The Final Negative Declaration evaluated proposed changes to the San Ramon Zoning Ordinance and concluded that the residual significance of all impacts was less than significant. The Addendum to the Final Negative Declaration evaluated additional changes to the Zoning Ordinance that were proposed after certification of the Final Negative Declaration, including the re-zoning of Parcel 1B from Administrative Office, Height Overlay(OA-H) to City Center Mixed Use (CCMU) in anticipation of the proposed project. The Addendum concluded that the additional changes to the Zoning Ordinance did not change the significance of any of the findings in the Final Negative Declaration.

The primary focus of the City of San Ramon General Plan EIR was to evaluate the environmental impacts of development and land use activities contemplated by the voter-approved 2020 San Ramon General Plan. The General Plan EIR analyzed development and land use at a programmatic level. The General Plan EIR considered, at a programmatic level, the development of a City Center project on the project site.

The City Civic Center Project EIR provided project-level analysis of the project identified in the General Plan EIR. The City Civic Center Project consisted of 276,000 square feet of civic and commercial uses, including City offices, Council Chamber, a library, a children's museum, a 1,200-seat performing arts center with a smaller 300-seat theater, 40,000 square feet of retail, and an aquatic center.

CEQA Guidelines Section 15162 provides that a subsequent EIR is warranted if the lead agency determines, among other things, that substantial changes have occurred to a project that will have one or more significant effects not discussed in the previous EIR. In this instance, the size of the proposed project has increased in terms of both acreage and intensity beyond what was previously evaluated in the General Plan EIR and the City Civic Center EIR. Therefore, the City of San Ramon

has determined that a subsequent EIR is warranted for the proposed project. This DSEIR utilizes new technical reports for aesthetics; air quality; biological resources; geology, soils, and seismicity; hydrology and water quality; noise; transportation; urban decay; and utilities and service systems. The new information presented by these new technical reports reflects changes in circumstances or contains information that was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIRs were certified.

Where appropriate, this DSEIR tiers off analysis in the General Plan EIR and City Civic Center EIR. Under Section 15152 of the State CEQA Guidelines, tiering is appropriate when the sequence of analysis follows from an EIR prepared for a general plan, policy, or program to an EIR of lesser scope, or to a site-specific EIR. The General Plan EIR and City Civic Center EIR, respectively, are general plan and policy-level documents for future development on the land contained within the boundaries of the project site. The proposed project is greater in scope than the project contemplated in the City Civic Center EIR. Thus, where applicable and where potential impacts associated with the proposed project were adequately analyzed in either the General Plan EIR or the City Civic Center EIR, this DSEIR relies on and tiers off the analysis and findings presented in those previously certified environmental documents. However, because the proposed project is of greater intensity and scale than previously considered in the City Civic Center EIR, and because the General Plan EIR considered the City Center project from a programmatic level, this DSEIR was prepared to provide project level analysis of the incremental increase in impacts above those examined in the City Civic Center EIR.

1.2 - Scope of the EIR

This DSEIR addresses the potential environmental effects of the proposed project. The City issued an Initial Study and Notice of Preparation (IS-NOP) for the proposed project on April 4, 2007, which circulated for the statutory 30-day period. The scope of this DSEIR includes the potential environmental impacts identified in the IS-NOP, comments obtained during a public scoping meeting held on March 15, 2007 in the San Ramon city offices, as well as issues raised by agencies and the public in response to the IS-NOP. The IS-NOP is contained in Appendix A of this DSEIR.

Ten comment letters were received in response to the IS-NOP. They are listed in Table 1-1 and provided in Appendix A of this DSEIR.

Table 1-1: IS-NOP Comments

Public Agencies		
Agency	Author	Date
Town of Danville	Tai J. Williams, Transportation Director	April 3, 2007
Governor's Office of Planning and Research, State Clearinghouse Unit	Scott Morgan, Senior Planner	April 4, 2007
Contra Costa Environmental Health Services	Joe Doser, Contra Costa Environmental Health	April 5, 2007
California Department of Transportation	Timothy C. Sable, District Branch Chief	April 9, 2007
Contra Costa County Public Works Department	John Pulliam, Associate Civil Engineer	April 10, 2007
Contra Costa County Public Works Department, Flood Control	Tim Jensen, Associate Civil Engineer	April 10, 2007
San Ramon Valley Fire Protection District	Michael Mentink, Deputy Fire Marshall	May 1, 2007
East Bay Municipal Utility District	William R. Kirkpatrick, Manager of Water Distribution Planning	May 3, 2007
East Bay Regional Parks District	Jim Townsend, Trail Development Program Manager	May 4, 2007
Private Parties and Organizations		
Organization	Author	Date
Mt. Diablo Sierra Club	Jim Blickenstaff, Chair	March 15, 2007
Source: City of San Ramon, 2007.		

Agency and Community Outreach

In addition to the statutory requirements, the City made various outreach efforts to consult with and solicit input from agencies and the community regarding the scope of the DSEIR. Between February and July 2007, the City sponsored several public meetings that included presentations to various City commissions, boards, and advisory committees about the project and provided opportunities for public comment. The City also sponsored presentations to private organizations such as the San Ramon Chamber of Commerce and Home Owner's Associations. City officials and consultants consulted with representatives from the California Department of Transportation, the San Ramon Valley Fire Protection District, the San Ramon Valley Unified School District, Contra Costa County Library, East Bay Regional Parks District, East Bay Municipal Utility District, and Central Contra Costa Sanitary District.

1.2.1 - Environmental Issues Determined To Be Not Significant

The IS-NOP identified two topical areas that were determined to be not significant. An explanation of why each area is determined to be not significant is provided in Section 7, Effects Found Not To Be Significant. These topical areas are as follows:

- Agriculture Resources
- Mineral Resources

In addition, certain subjects with various topical areas were determined to be not significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are not:

- Habitat Conservation Plans (Section 4.3, Biological Resources)
- Septic or Alternative Wastewater Disposal Systems (Section 4.5, Geology, Soils, and Seismicity)
- Aviation Hazards (Section 4.6, Hazards and Hazardous Materials)
- Wildland Fires (Section 4.6, Hazards and Hazardous Materials)
- Groundwater (Section 4.7, Hydrology and Water Quality)
- 100-Year Flood Hazards (Section 4.7, Hydrology and Water Quality)
- Levee or Dam Failure (Section 4.7, Hydrology and Water Quality)
- Seiche, Tsunami, or Mudflow Hazards (Section 4.7, Hydrology and Water Quality)
- Habitat Conservation Plans (Section 4.8, Land Use)
- Aviation Noise (Section 4.9, Noise)
- Displacement of Persons or Housing (Section 4.10, Population and Housing)
- Air Traffic Patterns (Section 4.12, Transportation)

An explanation of why each issue is determined to be not significant is provided in Section 7, Effects Found Not To Be Significant.

1.2.2 - Potentially Significant Environmental Topics

The Initial Study found that the following topical areas may contain potentially significant environmental issues that will require further analysis in the EIR.

- Aesthetics, Light, and Glare - Section 4.1
- Air Quality - Section 4.2
- Biological Resources - Section 4.3

- Cultural Resources - Section 4.4
- Geology, Soils, and Seismicity - Section 4.5
- Hazards and Hazardous Materials - Section 4.6
- Hydrology and Water Quality - Section 4.7
- Land Use - Section 4.8
- Noise - Section 4.9
- Population and Housing - Section 4.10
- Public Services and Recreation - Section 4.11
- Transportation - Section 4.12
- Urban Decay - Section 4.13
- Utility Systems - Section 4.14

1.3 - Organization of the EIR

This DSEIR is organized into the following main sections:

- **Section 1: Introduction.** This section provides an introduction and overview describing the purpose of this DSEIR, its scope and components, and its review and certification process.
- **Section 2: Executive Summary.** This section includes a summary of the proposed San Ramon City Center Project and alternatives to be addressed in the DSEIR. A brief description of the areas of controversy and issues to be resolved and an overview of the Mitigation Monitoring and Reporting Program—in addition to a table that summarizes the impacts, mitigation measures, and level of significance after mitigation— also are included in this section.
- **Section 3: Project Description.** This section includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the DSEIR, responsible agencies, and approvals that are needed for the proposed project are provided.
- **Section 4: Environmental Impact Analysis.** This section analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The following specific environmental topics are addressed within Section 4.
 - **Section 4.1 - Aesthetics, Light, and Glare:** Addresses the visual impacts of development intensification and the overall increase in illumination produced by the project.

- **Section 4.2 - Air Quality:** Addresses the local and regional air quality impacts associated with project implementation as well as consistency with the Bay Area Air Quality Management District Ozone Strategy plan.
- **Section 4.3 - Biological Resources:** Addresses the project's impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
- **Section 4.4 - Cultural Resources:** Addresses the impacts of project development on known historical resources and potential archaeological and paleontological resources.
- **Section 4.5 - Geology, Soils, and Seismicity:** Addresses the potential impacts the project may have on soils, and assesses the effects of project development in relation to geologic and seismic conditions.
- **Section 4.6 - Hazards and Hazardous Materials:** Addresses the likelihood of the presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- **Section 4.7 - Hydrology and Water Quality:** Addresses the impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- **Section 4.8 - Land Use:** Addresses the related land use impacts associated with implementation of the project, including physical division of an established community, project compatibility with surrounding land uses, and consistency with the City of San Ramon General Plan and the San Ramon Zoning Ordinance.
- **Section 4.9 - Noise:** Addresses the noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- **Section 4.10 - Population and Housing:** Addresses the potential of the proposed project to induce direct or indirect population growth.
- **Section 4.11 - Public Services and Recreation:** Addresses the impacts upon public service providers including fire, police, schools, parks, and other recreational facilities.
- **Section 4.12 - Transportation:** Addresses the impacts on the local and regional roadway system, parking, emergency access, public transportation, bicycle, and pedestrian access.
- **Section 4.13 - Urban Decay:** Analyzes the retail impacts of the proposed project on competing businesses, including the potential for store closures, long-term vacancies, and physical deterioration.
- **Section 4.14 - Utility Systems:** Addresses the impacts on water supply, wastewater, storm drainage, and solid waste.

- **Section 5: Alternatives to the Proposed Project.** This section compares the impacts of the proposed project with four project alternatives: the No Project Alternative, two Reduced Density Alternative options, and the City Civic Center Project Alternative. An environmentally superior alternative is identified.
- **Section 6: Other CEQA Required Sections.** This section provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts, and the project's irreversible and irretrievable commitment of resources. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.
- **Section 7: Effects Found Not to be Significant.** This section contains analysis of the topical issues not addressed in Section 4 because their impacts were found to be not significant.
- **Section 8: Organizations and Persons Consulted.** This section contains a full list of persons and organizations that were consulted during the preparation of this DSEIR.
- **Section 9: List of Preparers.** This section lists the authors and staff that assisted in the preparation of the DSEIR, by name and affiliation.
- **Section 10: References.** This section contains a full list of references that were used in the preparation of this DSEIR.
- **Appendices:** This section includes all notices and other procedural documents pertinent to the DSEIR, as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this DSEIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate sections(s). The relationship between the incorporated part of the referenced document and the DSEIR has also been described. The documents and other sources that have been used in the preparation of this DSEIR include, but are not limited to:

- City of San Ramon General Plan
- City of San Ramon General Plan Environmental Impact Report (SCH No. 2000082002)
- City Civic Center Project Environmental Impact Report (SCH No. 2003072022)
- San Ramon City Code
- City of San Ramon Zoning Ordinance Final Negative Declaration (SCH No. 2005122094)
- Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration
- East Bay Municipal Utility District 2005 Urban Water Management Plan

These documents are identified in Section 10, References, of this DSEIR. In accordance with Section 15150(b) of the CEQA Guidelines, the referenced documents and other sources used in the preparation of the DSEIR are available for review at the address shown below:

City of San Ramon
Planning/Community Development Department
Planning Services Division
2222 Camino Ramon
San Ramon, CA 94583

These documents can also be found online at the following websites:

- **City of San Ramon General Plan and EIR:** <http://www.ci.san-ramon.ca.us/gprc/gprcindex.htm>
- **East Bay Municipal Utility District 2005 Urban Water Management Plan:** http://www.ebmud.com/water_&_environment/water_supply/urban_water_management_plan/default.htm
- **San Ramon City Code:** <http://www.ci.san-ramon.ca.us/clerk/codes.htm>

1.5 - Documents Prepared for the Project

The stand-alone technical studies prepared for the proposed project are listed below, with their corresponding appendices in parentheses. Note that no stand-alone technical report was prepared for Section 4.4, Cultural Resources; rather, the entirety of the technical analysis is contained in the section.

- Air Quality Analysis, prepared by Michael Brandman Associates (Appendix B)
- Biological Resources Assessment, prepared by Michael Brandman Associates (Appendix C)
- Preliminary Geotechnical Investigation Report, prepared by MACTEC Engineering and Consulting, Inc. (Appendix D)
- Phase I Environmental Site Assessment, prepared by Michael Brandman Associates (Appendix E)
- Preliminary Hydrology Report, prepared by RBF Consulting (Appendix F)
- Noise Analysis, prepared by Michael Brandman Associates (Appendix G)
- Traffic Operations Evaluation, prepared by DMJM Harris (Appendix I)
- Urban Decay Analysis, prepared by Economic and Planning Systems (Appendix J)
- Water Supply Assessment, prepared by East Bay Municipal Utility District (Appendix K)

1.6 - Lead Agency, Sponsor, and Consultant

The City of San Ramon is the lead agency in the preparation of the DSEIR. The City of San Ramon and Sunset Development Company are the co-applicants for the proposed project. Michael Brandman Associates (MBA) is the environmental consultant under contract to the City of San Ramon for the project.

1.7 - Review of the DSEIR

Upon completion of the DSEIR, the City of San Ramon will file a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this DSEIR will be distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the DSEIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the DSEIR, including the technical appendices, is available for review at the City of San Ramon Planning/Community Development Department, the San Ramon Community Center, San Ramon Senior Center, Dougherty Station Community Center, the San Ramon Library, and the Dougherty Station Library. The addresses for each location are provided below:

City of San Ramon
Planning/Community Development Department
Planning Services Division
2222 Camino Ramon
San Ramon, CA 94583
Hours:
8:30 a.m. to 5 p.m., Monday–Friday

San Ramon Community Center
12501 Alcosta Boulevard
San Ramon, CA 94583
Hours:
8:30 a.m. to 5 p.m., Monday–Friday

Dougherty Station Community Center
17011 Bollinger Canyon Road
San Ramon, CA 94582
Hours:
8:30 a.m. to 5 p.m., Monday–Friday

San Ramon Senior Center
9300 Alcosta Boulevard
San Ramon, CA 94583
Hours:
8:30 a.m. to 5 p.m., Monday–Friday

Dougherty Station Library
17017 Bollinger Canyon Road
San Ramon, CA 94582
Hours:
10 a.m. to 8 p.m., Monday and Thursday
12 p.m. to 8 p.m., Tuesday and Wednesday
10 a.m. to 5 p.m., Friday and Saturday

San Ramon Library
100 Montgomery Street
San Ramon, CA 94583
Hours:
10 a.m. to 8 p.m., Monday–Thursday
10 a.m. to 5 p.m., Friday and Saturday
1 p.m. to 5 p.m., Sunday

Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on the DSEIR during the 45-day public review period. Written comments on this DSEIR should be addressed to:

Lauren Barr, Senior Planner
City of San Ramon
Planning/Community Development Department
Planning Services Division
2222 Camino Ramon
San Ramon, CA 94583
Phone: 925.973.2560
Fax: 925.806.0118
Email: lbarr@sanramon.ca.gov

Submittal of electronic comments in Microsoft Word format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review at least 10 days prior to the public hearing before the San Ramon Planning Commission on the project, at which the certification of the Final SEIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the project.

SECTION 2: EXECUTIVE SUMMARY

2.1 - Purpose

This Draft Subsequent Environmental Impact Report (DSEIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of San Ramon City Center Project (State Clearinghouse No. 2007042022). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.).

The purpose of this DSEIR is to disclose information to the public and decision makers about the potential environmental effects of a proposed project. This DSEIR does not recommend either approval or denial of a proposed project; rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This DSEIR describes the proposed project, analyzes its environmental effects, and discusses reasonable alternatives that would avoid, reduce, or minimize environmental impacts. The San Ramon Planning Commission will consider the information presented in this document in making an informed decision regarding the approval, conditions of approval, or denial of the proposed project.

2.2 - Tiering and Basis for Subsequent EIR

The purpose of this DSEIR is to provide project-level subsequent environmental impact analysis that accurately analyzes the proposed project in light of current conditions, circumstances, and new information that was not available and not analyzed in previously certified environmental documentation. The DSEIR contains a description of the project, description of the environmental setting, identification of the project impacts and cumulative impacts, and mitigation measures to reduce project impacts, as well as an analysis of alternatives to the project. This project-level DSEIR, where applicable, tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. Refer to Section 1.1.2 for a complete description of the previously certified environmental documents referenced in this DSEIR.

2.3 - Project Summary

2.3.1 - Project Location

The proposed project is located within the City of San Ramon in Contra Costa County, California (refer to Exhibit 3-1). The project site is composed of four parcels (1A, 1B, 2, and 3A) totaling 43.65 acres located on all four quadrants of the intersection of Bollinger Canyon Road and Camino Ramon (refer to Exhibit 3-2). Sunset Development Company owns the entirety of Parcels 1B and 2 and 6.71 acres of Parcel 1A; the City of San Ramon owns Parcel 3A and 7.56-acres of Parcel 1A. Sunset

Development Company has an option to purchase and develop the City-owned 7.56 acres of Parcel 1A and Parcel 3A. The project site is located on the Diablo, California, United States Geologic Survey 7.5-minute topographical map, Township 2 South, Range 1 West, Unsectioned.

2.3.2 - Project Description

The proposed project consists of the new construction of approximately 2.1 million square feet of retail, hotel, residential, office, and civic uses on approximately 44 acres. As part of this project, 194,652 square feet of existing office space will be demolished, and the project will utilize a vested un-built office entitlement of 328,220 square feet. As a result, the basis for environmental analysis is approximately 1.6 million “net” square feet above the existing vested entitlements for the site and approximately 1.9 million square feet of net additional construction beyond the existing property conditions. Specific project elements include approximately: 635,000 square feet of retail and cinema uses, a 169-room hotel, up to 487 residential dwelling units, 680,000 square feet of office space, 50,000 square feet of retail/flex uses, and a 110,000-square-foot City Hall, including Council Chambers, Library, and Police Department headquarters. In addition, the project includes nine parking structures totaling more than 6,600 new spaces, one future reserve parking structure with 513 spaces, and the construction of a new Transit Center. Section 3, Project Description provides detailed discussion about each component and includes plans and depictions of the project.

Plaza District

The Plaza District would be the largest component of the proposed project, both in terms of footprint and square footage. The Plaza District would occupy Parcels 2 and 3A and would consist of seven city blocks: A, B, C, D, E, F-G, and H. Blocks A through D would be located on Parcel 2, and Blocks E through H would be located on Parcel 3A. The Plaza District would be organized around Center Street, the principal east-west roadway that would bisect the district. Three north-south streets would intersect with Center Street—West Street, Camino Ramon, and East Street—and would create three internal intersections in the Plaza District. In addition, the existing Bishop Drive would be extended from its current terminus at the Bishop Ranch 3 parking structure to loop around the east side of the Plaza District and intersect with Bollinger Canyon Road.

The heart of the Plaza District would be centered around a large pedestrian plaza, located in front of the hotel on the south side of Center Street, between West Street and Camino Ramon. The plaza would be used for seasonal programs, such as farmer’s markets during the warmer months and outdoor ice skating during the winter months.

The Plaza District would contain retail, residential, office, and hotel uses, as well as parking facilities. Each is discussed below.

- **Retail:** Retail uses within the Plaza District would total approximately 635,042 square feet, potentially including two retail anchor stores, a six-screen arts cinema, and smaller inline retail uses such shops, restaurants, and spa/fitness/wellness.

- **Residential:** High-density residential uses would total approximately 550,669 square feet and up to 487 dwelling units, spread among five of the seven blocks of Plaza District. Unit sizes would range from 750 to 2,000 square feet. In accordance with the City’s Housing Element objective of setting aside 25 percent of new dwelling units as below market rate housing, a percentage of the dwelling units would be set aside as deed-restricted workforce housing available for households with qualifying incomes. If the project would not meet the 25 percent objective, then in-lieu-of fees would be provided to the City to develop affordable housing elsewhere in San Ramon.
- **Office:** Office uses totaling approximately 50,142 square feet would be located on the third, fourth, and fifth stories of Block H. These uses could be converted to retail, creating the potential for “office/retail flex.”
- **Hotel:** A six-story, 169-room, hotel totaling approximately 139,867 square feet would be located on Block C. The hotel would be the tallest structure in the Plaza District, reaching an elevation of approximately 91 feet, above finished grade.
- **Parking:** Six garages would provide 4,124 off-street parking spaces. On-street parking would be available along Center Street, West Street, and East Street, as well as portions of Camino Ramon.

Bishop Ranch 1A

A total of approximately 681,769 square feet of Class A office space would be developed among three buildings on Parcel 1A. Known as Bishop Ranch 1A, the three buildings would be identical in footprint, size, and design, and oriented around a circular fountain. Access to Bishop Ranch 1A would be taken from the existing Bishop Ranch 1 entrance road. Parking for Bishop Ranch 1A and Bishop Ranch 1 would be provided in three multi-story parking garages totaling 4,229 spaces. Two of the parking structures would be developed concurrently with Bishop Ranch 1A, the remaining structure would be developed after the complex opens and would be used for reserve parking. Surface parking spaces would also be available for both complexes.

City Hall and Transit Center

An approximately 110,490-square-foot City Hall and Transit Center would be developed on Parcel 1B. The City Hall would feature a four-story City office building with an attached dome-shaped Council Chamber. A cast sculpting of the City symbol—an aloft crow with extended wings—would crown the top of the dome housing the Council Chamber. A tiered water fountain would also be incorporated into the exterior design of the Council Chamber. The City Hall would provide space for a Council Chamber, City offices, meeting rooms, the Police Department headquarters, and the Library. The Transit Center would be incorporated into the ground floor of the two-level, 414-space parking garage that would be located on the south side of the City Hall. The Transit center would provide four bus bays, waiting area for passengers, bike racks/lockers and on-site transit ticket sales..

2.3.3 - Project Objectives

The objectives of the proposed project are to:

- Strengthen San Ramon and Bishop Ranch with a vibrant mix of complementary uses including retail, residential, office, hotel, and civic
- Develop a new, vital neighborhood for living, working, shopping, dining, entertaining, learning, and gathering
- Create new beautifully landscaped public spaces to accommodate community and cultural events
- Replace the outdated and undersized current City offices and Council Chamber with a new municipal campus with modern, adequately sized facilities to serve the ever-increasing demands of planned growth in San Ramon
- Enhance the public safety in San Ramon through the provision of a state-of-the-art Police Department headquarters
- Improve the delivery and quality of library services to San Ramon residents through the provision of a larger, technologically advanced library
- Increase mobility, reduce greenhouse gas emissions, and promote energy conservation in San Ramon, Bishop Ranch, and the proposed project through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers
- Capitalize on the proposed project's adjacency to the Iron Horse Trail to promote the use of pedestrian and bicycle modes of transportation and encourage trip and greenhouse gas reduction and energy conservation
- Encourage trip and greenhouse gas reduction and energy conservation throughout San Ramon, Bishop Ranch, and the proposed project through the siting of residential and office uses near shopping, dining and entertainment
- Establish public improvements including landscaped sidewalks, plazas, and pedestrian connections, streets, parking structures, and a new "ring road" extending Bishop Drive to Bollinger Canyon Road
- Add new experiences at Bishop Ranch, and to the San Ramon community, including a hotel, an art-screen cinema, new gourmet restaurants, and destination retail attractions
- Include high-quality, high-density housing in a mixed-use setting to increase the diversity of housing opportunities in San Ramon and provide a type of housing option that is not currently available to local residents
- Use high-quality architecture and landscaping consistent with the style of Bishop Ranch that will maintain and enhance the aesthetic character of the City of San Ramon

- Maximize roadway safety through the provision of multiple vehicular ingress and egress opportunities to the proposed project internal roadways and parking facilities and improvements to the surrounding circulation system
- Create increased new property and sales taxes annually, in perpetuity, for the City of San Ramon, and increased annual property taxes for Contra Costa County and various other local government agencies
- Increase property values throughout San Ramon and the San Ramon Valley
- Reduce regional freeway impacts resulting from dependency on regional urban centers to meet retail and entertainment needs by encouraging mixed use and infill development with localized entertainment and retail opportunities

2.4 - Significant Unavoidable Adverse Impacts

The DSEIR has identified the following issues where, after the implementation of feasible mitigation measures, the proposed project would nonetheless result in impacts that cannot be fully reduced to a level of less than significant in relation to the thresholds established by the CEQA Guidelines. Because these impacts are significant and unavoidable consequences of the proposed project, the San Ramon Planning Commission would be required to adopt a Statement of Overriding Considerations determining that the project's economic, social, and technological benefits outweigh its significant environmental effects. The following are significant unavoidable adverse environmental impacts of the proposed project:

- **Construction and operational emissions:** Daily emissions from project construction and operational activities would exceed Bay Area Air Quality Management District (BAAQMD) thresholds. Mitigation is proposed that would require implementation of air pollution control measures; however, these measures would not fully reduce this impact to a level of less than significant.
- **Cumulative air emissions:** Because construction and operational emissions would exceed BAAQMD thresholds, the proposed project would have a significant cumulative impact. No mitigation is available to reduce this impact to a level of less than significant.
- **Inconsistency with the Clean Air Plan:** Population growth and vehicle trips associated with the proposed project would exceed the projections contained in the BAAQMD Clean Air Plan. No mitigation is available to reduce this impact to a level of less than significant.
- **Greenhouse gas emissions:** Because of the size and intensity of the proposed project, it would have a cumulatively considerable contribution of greenhouse gas emissions. Mitigation is proposed that would require implementation of energy and water conservation measures; however, these measures would not fully reduce this impact to a level of less than significant.

- **Growth inducement:** Population growth attributable to the proposed project would exceed Association of Bay Area Government's (ABAG) projections for San Ramon. No mitigation is available to reduce this impact to a level of less than significant.
- **Freeway operations:** The proposed project would contribute new vehicle trips to Interstate 680, which currently operates a deficient level of service. No mitigation is available to reduce this impact to a level of less than significant.

2.5 - Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives.

2.5.1 - No Project Alternative

Under the No Project Alternative, the project site would remain in its existing condition, and the proposed project would not be developed. As part of this alternative, Parcel 1A would be developed as a 328,220-square-foot office complex in accordance with the previously approved entitlements set forth in the Chevron Park Annexation and Development Agreement. Bishop Ranch 2 and Parcel 3A would remain unchanged.

2.5.2 - Reduced Density Alternative - Option 1

The Reduced Density Option 1 Alternative consists of eliminating the Plaza District from the proposed project and developing only Bishop Ranch 1A and the City Hall and Transit Center. Bishop Ranch 1A and the City Hall and Transit Center would be identical in size, design, and use as envisioned by the proposed project. Bishop Ranch 2 and Parcel 3A would remain unchanged.

2.5.3 - Reduced Density Alternative - Option 2

The Reduced Density Option 2 Alternative consists of eliminating the Bishop Ranch 1A, and the City Hall and Transit Center components, and developing only the Plaza District. The Plaza District would be identical in size, design, and use as envisioned by the proposed project. As part of this alternative, Parcel 1A would be developed as a 328,220-square-foot office complex in accordance with the previously approved entitlements set forth in the Chevron Park Annexation and Development Agreement. Parcel 1B would remain unchanged.

2.5.4 - City Civic Center Alternative

The City Civic Center Alternative consists of developing the project detailed in City Civic Center Environmental Impact Report, certified by the San Ramon City Council in December 2003. The City Civic Center Project proposes 276,000 square feet of civic and commercial uses, including City offices, Council Chamber, a library, a children's museum, a 1,200-seat performing arts center with a smaller 300-seat theater, 40,000 square feet of retail on Parcel 3A, and an aquatic center on Parcel 1A. These uses would employ the existing Bishop Ranch 3 parking structure located immediately

north of Parcel 3A during non-office hours of the week and on weekends. The square footage for the Parcel 3A components are as follows:

- City Offices and Council Chamber: 70,000 square feet
- Library: 50,000 square feet
- Children's Museum: 20,000 square feet
- Center for Arts and Visual Arts Gallery: 96,000 square feet
- Retail: 40,000 square feet

The aquatic center would feature an Olympic-sized pool with stadium-style seating for 3,000 spectators and locker room facilities.

2.6 - Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

An Initial Study and Notice of Preparation (IS-NOP) for the proposed project were issued on April 4, 2007. The IS-NOP describing the original concept for the project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period that extended from April 4 through May 3, 2007. The IS-NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utility Systems
- Urban Decay

2.6.1 - Disagreement Among Experts

This EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of San Ramon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide the standards for treating disagreement among experts.

Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the

conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to make an informed judgment about the environmental consequences of the proposed project.

2.6.2 - Potentially Controversial Issues

Below are a list of potentially controversial issues that may be raised during the public review and hearing process of this DSEIR.

- Aesthetics and Visual Character
- Construction and Operational Air Emissions
- Climate Change
- Growth Inducement
- Long-Term Water Supply
- Construction and Operational Noise
- Parking
- Public Safety
- Public Services
- Traffic Congestion
- Urban Decay
- Water Supply

It is also possible that evidence will be presented during the 45-day statutory DSEIR public review period that may create disagreement. Decision makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision makers are not obligated to select the most environmentally preferable viewpoint. Decision makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision makers must consider comments received concerning the adequacy of the DSEIR and address any objections raised in these comments. However, decision makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the DSEIR, and can certify the Final SEIR without needing to resolve disagreements among experts.

2.7 - Public Review of the Draft EIR

The DSEIR will be available for public review for the statutory 45-day review period beginning August 13, 2007 and will circulate until September 26, 2007. The document will be available for public review at the following locations:

City of San Ramon
Planning/Community Development Department
Planning Services Division
2222 Camino Ramon
San Ramon, CA 94583
Hours: 8:30 a.m. to 5 p.m., Monday–Friday

San Ramon Community Center
12501 Alcosta Boulevard
San Ramon, CA 94583
Hours:
8:30 a.m. to 5 p.m., Monday- Friday

Dougherty Station Community Center
17011 Bollinger Canyon Road
San Ramon, CA 94582
Hours:
8:30 a.m. to 5 p.m., Monday- Friday

San Ramon Senior Center
9300 Alcosta Boulevard
San Ramon, CA 94583
Hours:
8:30 a.m. to 5 p.m., Monday- Friday

Dougherty Station Library
17017 Bollinger Canyon Road
San Ramon, CA 94582
Hours: 10 a.m. to 8 p.m., Monday and Thursday;
12 p.m. to 8 p.m., Tuesday and Wednesday;
10 a.m. to 5 p.m., Friday and Saturday

San Ramon Library
100 Montgomery Street
San Ramon, CA 94583
Hours: 10 a.m. to 8 p.m., Monday–Thursday
10 a.m. to 5 p.m., Friday and Saturday; 1
p.m. to 5 p.m., Sunday

During the 45-day review period, agency representatives and members of the public will be able to submit written comments on the DSEIR to the address provided below:

Lauren Barr, Senior Planner
City of San Ramon
Planning/Community Development Department
Planning Services Division
2222 Camino Ramon
San Ramon, CA 94583
Phone: 925.973.2560
Fax: 925.806.0118
Email: lbarr@sanramon.ca.gov

Submittal of electronic comments in Microsoft Word format is encouraged. After the public review period, written responses to all significant environmental issues raised in the comments will be prepared and made available for review for a minimum of 10 days prior to the public hearing at which the Final SEIR will be considered for certification by the San Ramon Planning Commission. The DSEIR, comments on and responses to the DSEIR, the Final SEIR, and findings will be included as part of the environmental record for consideration and certification by the San Ramon Planning Commission for the proposed project.

2.8 - Executive Summary Matrix

Table 2-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussion for the issue areas are included in the corresponding section of this DSEIR. Table 2-1 is included in the DSEIR as required by CEQA Guidelines Section 15123(b)(1).

Table 2-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 4.1 - Aesthetics, Light, And Glare		
Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.	No mitigation is necessary.	Less than significant impact.
Impact AES-2: The project would not substantially damage scenic resources within a State scenic highway.	No mitigation is necessary.	Less than significant impact.
Impact AES-3: Development of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.	No mitigation is necessary.	Less than significant impact.
Impact AES-4: The proposed project would create new sources of substantial light or glare that may adversely affect day or nighttime views.	MM AES-4. Prior to issuance of building permits, the applicant shall submit a site lighting plan to City of San Ramon for review and approval. The plan shall identify necessary requirements established in the Zoning Ordinance (D3-7 and D3-33) and must provide detailed information regarding lighting levels by the use of photometrics to indicate the maximum, minimum, and average footcandle lighting level proposed for this project. The plan shall also identify the type of light fixtures and pole height.	Less than significant impact.
Section 4.2 - Air Quality		
Impact AIR-1: The proposed project would result in substantial emissions of criteria pollutants during construction and operations.	MM AIR-1a. During construction activities, the following air pollution control measures shall be implemented: <ul style="list-style-type: none"> • The project applicant shall designate an onsite Air Quality Compliance Monitor who shall be responsible for directing compliance with the Best Available Control Measures listed below for fugitive dust mitigation during project construction. • For any earthmoving that is within 100 feet from any property lines, watering shall be performed as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. All watering activities shall adhere to the requirements of the proposed project’s Storm Water Pollution Prevention Plan. • For all disturbed surface areas (except completed grading areas), dust suppression shall be applied in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind-driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area. All 	Significant unavoidable impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.</p> <ul style="list-style-type: none"> • For all disturbed surface areas that are completed grading areas, water shall be applied to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind-driven fugitive dust, excluding any areas that are inaccessible because of excessive slope or other safety conditions. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan. • For all inactive disturbed surface areas, water shall be applied to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind-driven fugitive dust, excluding any areas that are inaccessible due to excessive slope or other safety conditions. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan. • For all unpaved roads, vehicle speed shall be limited to 15 miles per hour and water shall be applied at least once a day. • For all open storage piles, water shall be applied to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind-driven fugitive dust. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan. • To provide track-out control, chemical stabilization shall be paved or applied at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet. • Rerouting or rapid cleanup of temporary sources of mud and dirt shall be provided on unpaved roads. • Street sweeping of roads adjacent to the project site shall be done on a regular basis to reduce fugitive dust from traffic. • During rough grading and construction, an apron shall be built into the project site from the adjoining paved roadways. The apron shall be paved or have a petroleum-based palliative applied. All petroleum-based palliatives will comply with BAAQMD's Regulation 6, Rule 15. 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • During rough grading and construction, streets including shoulders adjacent to the project site shall be swept at least once per day to reduce fugitive dust from traffic, or as required by governing body, to remove silt which may have accumulated from construction activities. • All diesel-fueled engines used in the construction of the project shall use ultra-low sulfur diesel fuel, which contains no more than 15 ppm of sulfur, or alternative fuels (i.e., reformulated fuels, emulsified fuels, compressed natural gas, or power with electrification). Low-sulfur diesel fuel (500 ppm of sulfur content) shall be used only if evidence is obtained and maintained from the fuel supplier(s) that ultra-low sulfur diesel fuel is infeasible. • Based on prevailing and generally available technology and to the extent that equipment and technology is cost-effective, the construction contractor shall use catalyst and filtration technologies, and retrofit existing engines in construction equipment • The construction contractor shall discourage idling of construction equipment and vehicles (or minimize idling time to a maximum of 5 minutes when construction equipment is not in use). The contractor will post temporary signs on the construction site to remind equipment operators to minimize idling time. • When feasible, emission-intensive phases of construction (e.g., demolition and grading) should occur between November and April, which is outside of the ozone season (May to October). • In coordination with Mitigation Measure TRANS-9, the project applicant shall develop a Construction Traffic, Staging, and Parking Plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Operations affecting traffic for off-peak hours shall be scheduled. Obstruction of through-traffic lanes shall be minimized. When necessary, a flag person shall be provided to guide traffic properly and ensure safety at construction sites. <p>MM AIR-1b. Prior to occupancy of each project component, the project applicant shall demonstrate to the satisfaction of the City of San Ramon that the following operational air quality pollution control measures have been installed (if applicable):</p>	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Install display cases or kiosks in prominent areas that provide transportation information, including ridesharing information, transit schedules, and bicycle route and path information. • Dock and delivery areas shall include: <ul style="list-style-type: none"> - Signage advising truck drivers to turn off engines when not in use - Signage advising truck drivers of State law prohibiting diesel idling of more than five minutes - Auxiliary 110 v and 220 v power units so trucks can power refrigeration units or other equipment without idling • Mechanical ventilation that disperses exhaust efficiently shall be installed in all parking structures in accordance with State standards. • Surface parking areas shall include clearly marked and shaded pedestrian pathways between transit facilities, adjacent sidewalks, and building entrances. • Where safety and space constraints do not take precedence, loading and unloading facilities shall be provided near building entrances for transit and carpool/vanpool users with clear visible signage. • Where practicable and beneficial to the project air quality objectives, cool paving and high-albedo construction materials shall be used for roads, driveways, and other select surfaces to increase reflectivity. • Low nitrogen oxide-emitting or high-efficiency water heaters shall be installed. • If the Plaza District residential units include fireplaces, only natural gas fireplaces shall be allowed; conventional open-hearth fireplaces shall not be permitted. • All heating, ventilation, and air conditioning (HVAC) systems shall include high-efficiency filters for particulates and a carbon filter to remove other chemical matter. 	
<p>Impact AIR-2: The proposed project would not create carbon monoxide hot spots that would exceed federal or State concentration standards.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact AIR-3: Because operational emissions would exceed regional thresholds, the proposed project would have a significant cumulative impact on air quality.</p>	<p>Refer to Mitigation Measures AIR-1a and AIR-1b.</p>	<p>Significant unavoidable impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact AIR-4: The proposed project would be inconsistent with the projections contained in the BAAQMD Clean Air Plan.	No mitigation is available.	Significant unavoidable impact.
Impact AIR-5: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	No mitigation is necessary.	Less than significant impact.
Impact AIR-6: The proposed project would not generate objectionable odors that would affect a substantial number of people.	No mitigation is necessary.	Less than significant impact.
Impact AIR-7: Emissions from the proposed project would represent a cumulatively considerable contribution to global greenhouse gas emissions.	<p>MM AIR-7. Prior to issuance of occupancy permits, the project applicant shall institute the following greenhouse gas emission reduction features, unless safety or technical feasibility considerations takes precedence:</p> <ul style="list-style-type: none"> • Where feasible, project buildings shall include energy-efficient technologies or measures that exceed Title 24 energy efficiency standards or comply with Energy Star home energy standards. • Where practicable high-albedo and emissive roofs or Energy Star-approved roofing materials shall be used. • Project landscaping shall include trees and shrubs that shed their leaves in winter nearer to these structures to maximize shade to the building during the summer and allow sunlight to strike the building during the winter months. • Where possible, HVAC equipment should be shaded from direct sunlight • At least 50 percent of project landscaping shall consist of low ozone-forming potential, drought-tolerant trees and shrubs, as listed in East Bay Municipal Utility District’s Plants and Landscapes for Summer-Dry Climates or similar landscape reference. 	Significant unavoidable impact.
Section 4.3 - Biological Resources		
Impact BIO-1: Special status wildlife species may be adversely affected by project construction activities.	MM BIO-1a. Prior to any ground disturbance activities on Parcel 3A or the undeveloped portion of Parcel 1A, a qualified biologist shall conduct a focused survey to determine the presence or absence of burrowing owls onsite. The survey shall be conducted according to the standard protocol established by CDFG and the Burrowing Owl Consortium (BOC). If burrowing owls are determined to be present on the site, mitigation for potential impacts to owls shall follow the guidelines outlined by the BOC,	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>including passive relocation. If vegetation removal or ground disturbance begins within 30 days of the focused survey, no pre-construction survey would be required. If vegetation removal or ground disturbance activities begin after 30 days of the focused survey, a pre-construction survey would be required to be performed no earlier than 30 days prior to vegetation removal or ground disturbance.</p> <p>MM BIO-1b. If suitable avian nesting habitat is intended to be removed during the nesting season (February 1 through August 31), a qualified biologist shall conduct a nesting bird survey to identify any potential nesting activity. If passerine birds are found to be nesting, or there is evidence of nesting behavior within 250 feet of the impact area, the biologist shall determine an appropriate buffer that shall be required around the nests. No vegetation removal or ground disturbance would occur within this buffer. For raptor species—birds of prey (e.g., hawks and owls)—this buffer would generally be 500 feet. A qualified biologist shall monitor the nests closely until it is determined that the nests are no longer active, at which time construction activities may commence within the buffer area. Construction activity may encroach into the buffer area at the discretion of the biological monitor.</p>	
<p>Impact BIO-2: The proposed project would not adversely affect riparian habitat or sensitive natural communities.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact BIO-3: The proposed project would not adversely affect wetlands.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact BIO-4: Development of the proposed project would not result in adverse impacts to wildlife movement.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact BIO-5: The proposed project would not conflict with local policies or ordinances related to the protection of biological resources.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Section 4.4 - Cultural Resources</p>		
<p>Impact CUL-1: Subsurface construction activities associated with the proposed project have the potential to damage or destroy previously undiscovered historic resources.</p>	<p>MM CUL-1. If a potentially significant historic resource is encountered during subsurface activities, all construction within a 100-foot radius of the find shall cease until a qualified archaeologist determines whether the resource requires further study. The project applicant shall include a standard inadvertent discovery clause in every construction contract to</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of, but are not limited to, glass, ceramics, stone, bone, wood, and shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, a qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan, if necessary. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for permanent curation of the recovered resources.</p>	
<p>Impact CUL-2: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered archaeological resources.</p>	<p>Refer to Mitigation Measure CUL-1.</p>	<p>Less than significant impact.</p>
<p>Impact CUL-3: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered paleontological resources.</p>	<p>MM CUL-3. Prior to initiation of deep excavation procedures at depths greater than 10 feet, a qualified paleontological monitor will be retained to conduct an onsite monitoring program to ensure protection of previously unknown paleontological specimens. In the event a fossil is discovered during construction of the proposed project when the paleontological monitor is not present, excavation within 100 feet of the find shall be temporarily halted until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the City and project applicant of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the City determines that avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be submitted to the City for review and approval. Upon approval, the plan shall be incorporated into the project.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact CUL-4: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered burial sites.</p>	<p>MM CUL-4. If human remains are encountered during earth-disturbing activities for the proposed project, all work within 100 feet of the find shall stop immediately and the Contra Costa County Coroner’s office shall be notified. If the Coroner determines the remains are Native American in origin, the Native American Heritage Commission will be notified and, in turn, will notify the person determined to be the Most Likely Descendent (MLD). The MLD will provide recommendations for treatment of the remains (CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Sections 5097.94 and 5097.98).</p>	<p>Less than significant impact.</p>
<p>Section 4.5 - Geology, Soils, and Seismicity</p>		
<p>Impact GEO-1: The proposed project would not expose persons or structures to seismic hazards.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact GEO-2: The proposed project may result in substantial erosion or loss of topsoil.</p>	<p>Refer to Mitigation Measures HYD-1a and HYD-1b in Section 4.7, Hydrology and Water Quality.</p>	<p>Less than significant impact.</p>
<p>Impact GEO-3: The project site contains fill of unknown origin that may be unable to adequately support structures associated with the proposed project if left unmitigated.</p>	<p>MM GEO-3a. Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to test the existing imported fill soils on Parcels 1A and 3A to determine their in situ compaction and suitability for excavation and reuse as engineered fill. Soil testing can be avoided if the applicant elects to remove the fill and place it either in areas where it will not support buildings or in paved areas (i.e., landscaped areas) or dispose of it offsite.</p> <p>MM GEO-3b. Prior to the commencement of building construction, the project applicant shall retain a qualified engineer to design a foundation system adequate to support the proposed project’s structures. Based on the recommendations of the Geotechnical Report, the foundation should be pile-supported. Pile types may include, but are not limited to, driven, drilled, cast-in-place, concrete piers, or auger cast-in-place concrete piles. Settlement analysis shall be performed once the structural design loads and foundation system geometry have been defined for each building. This mitigation measure does not preclude the use of structural raft foundations or a mix of deep and shallow foundations, provided that detailed design analysis has been conducted to verify the suitability of these foundations.</p> <p>MM GEO-3c. Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to perform additional geotechnical investigations. The recommendations of these additional investigations shall be incorporated into the project design.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	Additional geotechnical investigations shall determine: <ul style="list-style-type: none"> • The subsurface conditions in areas not previously investigated • The nature and extent of the stockpiled soils (undocumented fill) on Parcel 1A • Deeper soil data to support the analysis of longer and higher-capacity piles • Current information regarding depths to groundwater for buildings that will have full-depth basements 	
Impact GEO-4: The project site contains moderately expansive soils that may create substantial risks to life or property if left unmitigated.	MM GEO-4. Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to test the existing onsite expansive clay soils on Parcels 1A and 3A to determine their in situ compaction and suitability for excavation and reuse as engineered fill. Soil testing can be avoided if the applicant elects to remove the expansive clay soils and place them in areas where they will not support buildings or paved areas (i.e., landscaped areas) or dispose of them offsite. This mitigation measure does not preclude the use of lime treatment, provided that detailed design analysis has been conducted to verify the suitability of this approach.	Less than significant impact.
Section 4.6 - Hazards and Hazardous Materials		
Impact HAZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-2: The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would not create a potential hazard to the public and the environment.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-3: The proposed project would not expose Iron Horse Middle School or Central Park to hazardous emissions, materials, substances, or waste.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-4: The proposed project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 4.7 - Hydrology and Water Quality		
<p>Impact HYD-1: Construction activities associated with the proposed project could adversely impact water quality.</p>	<p>MM HYD-1a. Prior to the issuance of grading permits, the project applicant shall prepare and submit a SWPPP and Grading Plan to the City of San Ramon that identify specific actions and BMPs to prevent stormwater pollution from construction sources. The plans shall identify a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The applicant shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories:</p> <ul style="list-style-type: none"> • Soil stabilization practices • Dewatering practices (if necessary) • Sediment and runoff control practices • Monitoring protocols • Waste management and disposal control practices <p>Once approved by the City, the applicant’s contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the SWPPP and Grading Plan.</p> <p>MM HYD-1b. The City shall ensure that the project SWPPP identifies pollutant sources that could affect the quality of stormwater discharges from the construction site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project construction sites. To protect receiving water quality, the SWPPP shall include, but is not limited to, the following elements:</p> <ul style="list-style-type: none"> • Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas. • No disturbed surfaces will be left without erosion control measures in place during the winter and spring months. 	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures. Of critical importance is the protection of existing catch basins that drain to San Ramon Creek. • The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. • BMP performance and effectiveness shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. • In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season. 	
<p>Impact HYD-2: Land use activities associated with the proposed project could adversely impact water quality.</p>	<p>MM HYD-2a. The applicant shall develop and implement a Landscaping Management Plan (LMP) for landscaped areas with the goal of reducing potential discharge of herbicides, pesticides, fertilizers, and other contaminants to local waterways. All contractors involved in project-related landscaping conducted during the individual phases of development, as well as maintenance of landscaping following project completion, shall complete their work in strict compliance with the LMP. The applicant shall be responsible for ensuring that requirements of the LMP are provided to and instituted by future project tenants following project completion. The LMP shall be prepared by a licensed landscape architecture firm with experience in methods to reduce or eliminate the use of landscape chemicals that could cause adverse effects to the environment. At a minimum, this LMP shall:</p> <ol style="list-style-type: none"> 1. Require that pesticides and fertilizers not be applied in excessive quantities, and only applied at times when rain is not expected for at least two weeks, in an effort to minimize leaching and runoff into the storm drainage system. 2. Encourage the use of organic fertilizers and mulching of landscaped areas to inhibit weed growth and reduce water demands. 	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>3. Utilize native, perennial, drought-tolerant vegetation to minimize irrigation needs.</p> <p>4. Specify the maintenance measures to be used (e.g., mowing) and will specify an application schedule for all fertilizer amendments and pesticide applications.</p> <p>5. Identify a list of preferred herbicides and pesticides and instances in which their use would be appropriate and the associated application rate.</p> <p>MM HYD-2b. Prior to the issuance of a site development permit, the project applicant shall provide supporting documentation demonstrating the effectiveness of infiltration devices for stormwater treatment and enter into a Stormwater Management Facilities Operations and Maintenance Agreement with the City of San Ramon. In accordance with RWQCB requirements, proposed infiltration devices shall meet, at a minimum, the following conditions:</p> <ol style="list-style-type: none"> 1. Pollution prevention and source control measures shall be implemented at a City-approved level to protect groundwater quality at sites where infiltration devices are to be used. 2. Infiltration devices shall include an enforceable maintenance schedule to ensure they are adequately maintained over the long term to maximize pollutant removal capabilities. 3. Onsite percolation tests will be conducted for all sections of the project site where infiltration technologies are proposed to confirm adequate soil percolation. 4. The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 5 feet. <p>If, after further evaluation, the proposed infiltration devices prove to be infeasible for portions or the entirety of the project site, the applicant shall revise the plan to include one or a combination of the following stormwater treatment devices:</p> <ul style="list-style-type: none"> • Check dams with the vegetated swales • Placement of vegetated filter strips parallel to the top of the channel banks of the bioswales 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Retention/Detention ponds • Retention rooftops • Oil/grease separators for parking areas • Compost berms • Street sweeping <p>The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City identifying procedures to ensure that stormwater quality control measures work properly during operations.</p>	
<p>Impact HYD-3: The project may substantially deplete groundwater supplies or interfere substantially with groundwater recharge.</p>	<p>MM HYD-3. Implement Mitigation Measure HYD-2b.</p>	<p>Less than significant impact.</p>
<p>Impact HYD-4: Development of the proposed project would not create the potential for downstream flooding or substantial erosion or siltation on- or offsite as a result of alteration of drainage patterns.</p>	<p>No mitigation is required.</p>	<p>Less than significant impact.</p>
<p>Impact HYD-5: Development of the proposed project would create or contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems.</p>	<p>MM HYD-5. Prior to issuance of site development permits for installation of the storm drain improvements, the project applicant shall submit plans and final hydraulic analysis to the City of San Ramon Engineering Department that depict the final design and specifications of the 96-inch drainage pipe. The plans shall demonstrate that the radius of the pipe, also referred to as beveled or mitered pipe, incorporates the deflection angle in the pipe joint and does not compromise the hydraulic capacity of the drainage system. A final hydrology and hydraulic report shall be submitted to the City to assess the capacity of the new drainage system within the planned development. The City shall review and approve the storm drain improvement plans prior to issuance of site development permits.</p>	<p>Less than significant impact.</p>
<p>Section 4.8 - Land Use</p>		
<p>Impact LU-1: The proposed project would not physically divide an established community or create conflicts with neighboring land uses.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact LU-2: The proposed project would be consistent with the City of San Ramon General Plan.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact LU-3: The proposed project would be consistent with the City of San Ramon Zoning Ordinance.	No mitigation is necessary.	Less than significant impact.
Section 4.9 - Noise		
Impact NOI-1: The proposed project would generate substantial construction noise that may adversely impact nearby noise-sensitive land uses.	<p>MM NOI-1. All construction activities shall adhere to the following requirements:</p> <ul style="list-style-type: none"> • All construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. • Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from either the Residence Inn or the Reflections Condominiums, unless safety or technical feasibility takes precedence. • Stationary combustion equipment such as pumps or generators operating within 500 feet of the Residence Inn or the Reflections Condominiums shall be shielded from these noise-sensitive land uses with a noise protection barrier. 	Less than significant impact.
Impact NOI-2: Operational vibration associated with the proposed project may subject project residents to substantial vibration.	MM NOI-2. Upon completion of the architectural plans for Block A, D, and E of the Plaza District and prior to the issuance of a building permit, the applicant shall retain a qualified acoustical consultant to prepare a vibration analysis to assess the potential vibration impacts onto the proposed residential units. If the vibration analysis indicates that residential units would be exposed to vibration greater than 0.25 PPV, the analysis shall provide vibration-attenuation recommendations that shall be incorporated into the project design. The City shall review and approve the vibration analysis.	Less than significant impact.
Impact NOI-3: Operational activities associated with the proposed project would not create any substantial offsite noise impacts.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact NOI-4: Project occupants may be exposed to noise levels that exceed normally acceptable standards.</p>	<p>MM NOI-4a. The project applicant shall provide a “windows closed” condition for all residential units. A windows closed condition requires a means of mechanical ventilation per the Uniform Building Code standards. This shall be achieved with standard air conditioning or a fresh air intake system.</p> <p>MM NOI-4b. The project applicant shall ensure that all air ducts and vents for the residential units shall either (1) incorporate sound baffle ducting or (2) be oriented away from the respective traffic noise source and incorporate at least 6 feet of flexible fiberglass ducting and at least one 90-degree bend.</p> <p>MM NOI-4c. The project applicant shall provide exterior walls with a minimum Sound Transmission Class rating of 46 for all residential units. Typical walls with this rating will have 2x4 studs or greater, 16 inches on-center with R-13 insulation, a minimum 0.875-inch exterior surface of cement plaster and a minimum interior surface of 0.5-inch gypsum board.</p> <p>MM NOI-4d. The project applicant shall install window and door assemblies in the proposed project’s structures that are well fitted and weatherstripped and free of oversize cut outs and openings that unnecessarily increase interior noise exposure.</p>	<p>Less than significant impact.</p>
<p>Section 4.10 - Population and Housing.doc</p>		
<p>Impact POP-1: The proposed project would induce substantial population growth beyond regional population forecasts.</p>	<p>No mitigation is available.</p>	<p>Significant unavoidable impact.</p>
<p>Section 4.11 - Public Services and Recreation</p>		
<p>Impact PSR-1: Development of the proposed project may create the potential for increased calls and response times that may result in a need for new or physically altered fire facilities in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p>MM PSR-1a. Prior to occupancy of any of the Plaza District structures or Bishop Ranch 1A office buildings, the project applicant shall test the proposed structures to ensure that the public safety radio signals meets a minimum signal strength of -95 dBm in 90 percent of the area of each floor of the building and a 100-percent reliability factor. Testing shall be conducted by a Federal Communications Commission-certified technician approved by the San Ramon Valley Fire Protection District. In the event radio signal deficiencies are determined, the project proponents shall install a Fire District-approved radio signal amplification system to ensure</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>compliance with minimum signal strengths established by this condition. Any required amplification system shall be maintained in perpetuity by the property owner.</p> <p>MM PSR-1b. Prior to occupancy of any project buildings, all structures shall be equipped with the most reliable, commercially available fire alarm technology, as approved by the San Ramon Valley Fire Protection District deemed to be the most reliable available by the San Ramon Valley Fire Protection District. The project applicant shall be responsible for maintaining these systems during project operations.</p> <p>MM PSR-1c. Prior to any building occupancy, the project applicant shall provide a “fair share” contribution to the San Ramon Valley Fire Protection District for development of a high-rise firefighting training center.</p>	
<p>Impact PSR-2: Development of the proposed project would not result in a need for new or physically altered police facilities in order to maintain acceptable service ratios, response times, or other performance objectives.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact PSR-3: Development of the proposed project would not result in a need for new or physically altered school facilities in order to maintain acceptable pupil-teacher ratios or other performance objectives.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact PSR-4: Development of the proposed project would not result in a need for new or physically altered library facilities in order to maintain acceptable service ratios or other performance objectives.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact PSR-5: Development of the proposed project would not result in a need for new or physically altered parks in order to maintain acceptable parkland ratios.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact PSR-6: Development of the proposed project may cause physical deterioration of the Iron Horse Trail, resulting in a need for safety improvements.</p>	<p>MM PSR-6. Prior to occupancy of any of the Plaza District structures, the project proponent shall install a fence and landscape buffer along the entire length of the Iron Horse Trail frontage with Bishop Drive. The fence and landscape buffer shall be designed to prevent bicyclists and pedestrians from making unauthorized crossings of Bishop Drive between the Plaza District and the Iron Horse Trail. As part of this improvement, a single</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>entry point to the Iron Horse Trail from the Plaza District shall be created. The project applicant shall submit plans showing the fence and landscape buffer to East Bay Regional Parks District for review and comment and the City of San Ramon for review and approval. All fence and landscape improvements within the Iron Horse Trail corridor shall be dedicated to Contra Costa County and maintained by East Bay Regional Parks District for ongoing management pursuant to the license agreement with the County. East Bay Regional Parks District shall have the option to pursue a maintenance agreement with the project proponents to ensure that the landscape improvements are maintained to a mutually agreeable level.</p>	
<p>Impact PSR-7: Development of the proposed project would not result in a need for new or physically altered community facilities in order to maintain acceptable ratios.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Section 4.12 - Transportation</p>		
<p>Impact TRANS-1: Trips associated with the proposed project would substantially degrade intersection performance under Existing Plus Project conditions.</p>	<p>MM TRANS-1a. When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a northbound right-turn lane on San Ramon Valley Boulevard at Bollinger Canyon Road. The proposed intersection improvements are part of the City Capital Improvement Program.</p> <p>MM TRANS-1b. This mitigation consists of two parts:</p> <ol style="list-style-type: none"> 1. When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a free southbound right-turn lane on Sunset Drive at Bollinger Canyon Road. The southbound curb lane along Sunset Drive would be signed for northbound I-680 only. This lane would be free-flowing into the westbound curb lane on Bollinger Canyon Road. The adjacent lane on Bollinger Canyon Road would be physically separated from the curb lane to prevent weaving between Sunset Drive and the northbound I-680 on-ramp. 2. To respond to the off-peak parking on Camino Ramon, curbside traffic will be required to turn right at Bishop Drive, prior to the proposed parking. To enhance the effectiveness of this mitigation measure, the project applicant shall install signage along the southbound approach of Camino Ramon prior to the intersection with Bishop Drive 	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>indicating that the curbside, right southbound lane between Bishop Drive and Bollinger Canyon Road is through-right-turn lane during peak commute hours. During non-peak commute hours, Camino Ramon shall have one through travel lane in each direction between Bishop Drive and Bollinger Canyon Road.</p> <p>MM TRANS-1c. When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a third eastbound and westbound through lane on Bollinger Canyon Road at Alcosta Boulevard. The proposed intersection improvements are part of the City Capital Improvement Program.</p>	
<p>Impact TRANS-2: Trips associated with the proposed project would substantially degrade intersection performance under Year 2020 conditions.</p>	<p>MM TRANS-2. When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the signalization of the intersection of Bollinger Canyon Road and Norris Canyon Road. The proposed intersection improvements are part of the City Capital Improvement Program.</p>	<p>Less than significant impact.</p>
<p>Impact TRANS-3: The proposed project would contribute to deficient freeway ramp operations.</p>	<p>No mitigation is available.</p>	<p>Significant unavoidable impact.</p>
<p>Impact TRANS-4: The proposed project would contribute to deficient queuing under Year 2020 conditions.</p>	<p>MM TRANS-4a. When the improvements are warranted based on the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a second left-turn lane on southbound Sunset Drive at Bollinger Canyon Road totaling 170 feet.</p> <p>MM TRANS-4b. When the improvements are warranted based on the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the extension of a left-turn lane on eastbound Bollinger Canyon Road at Sunset Drive totaling a distance of 900 feet.</p> <p>MM TRANS-4c. When the improvements are warranted based on the City’s annual monitoring program, the project applicant provide pro-rata share payments to the City to re-stripe one of the westbound Bishop Drive through lanes to a left-turn lane to provide storage capacity back to West Street. As part of the re-striping, the City shall install “Keep Clear” signage and pavement markings at the intersection of Bishop Drive and Parking Structure A.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact TRANS-5: The proposed project would not provide adequate off-street parking in accordance with the requirements of the City Code.</p>	<p>MM TRANS-5a. The project applicant shall designate a minimum of 203 parking spaces for the use of the hotel. Spaces shall be designated with markings and signage.</p> <p>MM TRANS-5b. Prior to issuance of building permits, the project applicant shall submit for review and approval of the City a Motorcycle Parking Study, identifying the location of the minimum number of motorcycle parking spaces for each project component. Each motorcycle parking space shall have minimum dimensions of 4 feet by 7 feet.</p>	<p>Less than significant impact.</p>
<p>Impact TRANS-6: The proposed project may result in inefficient traffic patterns resulting from the provision of on-street parking on Camino Ramon.</p>	<p>MM TRANS-6a. The City of San Ramon shall monitor Camino Ramon between Bollinger Canyon Road and Bishop Drive for inefficient traffic operations after Plaza District opening. Monitoring activities may include, but are not limited to, video observation, traffic counts, review of police reports, or other activities that empirically document traffic operations. If necessary, the City shall take action through one or a combination of the following corrective measures, which shall be financed by the project applicant:</p> <ul style="list-style-type: none"> • Additional signage or street markings identifying appropriate on-street parking locations, alternate routes, or potential hazards (e.g., vehicles entering the travel lanes) • Increased traffic enforcement • Stationing traffic control personnel at strategic locations during peak commute times • Public education efforts • Increasing the hours that on-street parking is prohibited • Entirely eliminating on-street parking 	<p>Less than significant impact.</p>
<p>Impact TRANS-7: The proposed project would not result in inadequate emergency access.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact TRANS-8: The proposed project would provide public transit, bicycle, and pedestrian opportunities and would not conflict with adopted policies, plans, or programs supporting alternative transportation.</p>	<p>MM TRANS-8a. Prior to issuance of building permits, the project applicant shall submit for review and approval of the City a Bicycle Parking Study, identifying the location of the minimum number of bicycle parking spaces for each project component. Bicycle storage facilities, when feasible, shall be provided near the primary entrance of each structure they are intended to service.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact TRANS-9: The proposed project may create substantial short-term traffic, parking, and vehicular access impacts associated with construction activities.</p>	<p>MM TRANS-9a. Prior to the commencement of construction, the project applicant shall provide a Construction Traffic, Staging, and Parking Management Plan to the City of San Ramon for review and approval. All construction contracts shall include a clause requiring compliance with the Construction Traffic, Staging, and Parking Management Plan. The plan shall include the following provisions:</p> <ul style="list-style-type: none"> • Construction truck traffic shall be limited to the following designated haul routes: Bollinger Canyon Road, Camino Ramon, Sunset Drive, Bishop Drive, the Bishop Ranch 1 entrance road, and the Bishop Ranch 1 East road. Construction truck traffic shall be prohibited on all other roadways, unless compelling circumstances warrant such movements (e.g., a major traffic accident). • Signage shall be installed at construction truck ingress and egress points alerting motorists to such movements. • Soil, debris, or other loose materials shall be covered with tarps or other restraining material during haul movements on roadways • On-site and off-site construction staging and parking locations shall be identified, as well as any necessary shuttle service needed to transport workers from off-site locations. For safety reasons, off-site staging or parking shall not be allowed at Central Park or Iron Horse Middle School. • A pre-construction conference shall be held advising all construction contractors of the requirements of the Construction Traffic, Staging, and Parking Management Plan. • A requirement obligating the project applicant to repair any roadways damaged by construction equipment or activities. 	<p>Less than significant impact.</p>
<p>Section 4.13 - Urban Decay</p>		
<p>Impact UD-1: Development of the proposed project would not result in closure of competing business that would create long-term store vacancies in the Trade Area.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact UD-2: Development of the proposed project and other planned retail projects would not result in the closure of competing businesses to the extent that it would result in urban decay.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 4.14 - Utility Systems		
Impact US-1: The proposed project would substantially increase demand for potable water.	MM US-1a. To the maximum extent practicable, all outdoor landscaped areas associated with the Plaza District, Bishop Ranch 1A, and City Hall shall be irrigated with recycled water from the DERWA system.	Less than significant impact.
	<p>MM US-1b. All project landscaping shall comply with the Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495), which requires that a landscape documentation package be submitted to the lead agency prior to the issuance of ministerial permits. The package shall include the following: a water conservation concept statement, calculations of water allowance and usage, a landscape design plan, an irrigation design plan, irrigation schedules, a maintenance schedule, a landscape irrigation audit schedule, a grading design plan, and soil analysis.</p> <p>MM US-1c. The project applicant shall implement the following water conservation measures into their respective components of the proposed project:</p> <ul style="list-style-type: none"> • High-efficiency clothes washers and dishwashing machines. • Re-circulating hot water systems. • High-efficiency or tankless hot water heaters. • Green roofs. • Evapotranspiration-based irrigation controllers. • Water budgets for landscape irrigation. • High efficiency toilets in non-residential buildings. 	
Impact US-2: The proposed project would not result in a need for new or expanded offsite conveyance or treatment facilities.	No mitigation is necessary.	Less than significant impact.
Impact US-3: The proposed project would not result in a need for new or expanded offsite storm drainage facilities.	No mitigation is necessary.	Less than significant impact.
Impact US-4: The proposed project would generate substantial amounts of solid waste that may result in the unnecessary use of regional landfill capacity.	MM US-4a. Prior to the issuance of demolition permits, the project applicant shall submit a recycling plan to the City of San Ramon identifying the procedures by which construction and demolition would be salvaged and recycled to the maximum extent feasible. The plan shall	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>include proof that a construction and demolition debris recycler is under contract to the applicant to perform this work.</p> <p>MM US-4b. Prior to the issuance of occupancy permits, the project applicant shall submit a Recycling and Waste Reduction Plan to the City of San Ramon identifying practices it and its tenants would implement during project operations that demonstrate at least 50-percent diversion.</p> <p>Operation recycling and waste reduction practices shall include, but not be limited to:</p> <ul style="list-style-type: none"> • Contracting with one or more City-licensed commercial recycling providers to serve all project commercial uses. Recyclable materials collection containers shall be provided in common commercial tenant disposal areas and be equipped to accept aluminum, cardboard, glass, green waste, mixed paper, and plastic materials, and, where feasible, food scraps. • Compliance with City of San Ramon’s 50-percent waste diversion ordinance. • Installation of common recycling facilities in all residential uses. These facilities shall be equipped to accept aluminum, cardboard, glass, mixed paper, and plastic materials and contain signage clearly identifying accepted materials. • Periodic notification of residents and commercial tenants about the location of recycling facilities and accepted materials. • Installation of recyclable materials receptacles in public places (e.g., along streets in the Plaza District, outside of City Hall, etc.). Recycling receptacles shall be of high-quality design and contain signage clearly identifying accepted materials. Common commercial and residential disposal areas shall be designed with sufficient space to accommodate separate containers for solid waste, recyclables, organics, and—for restaurants—tallow, subject to approval of the franchise waste provider and City of San Ramon. Plans should include adequate and safe access for solid waste and recycling vehicles to access and collect materials. 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>Impact US-5: The proposed project would demand substantial amounts of electricity and natural gas.</p>	<p>MM US-5. The project applicant shall implement the following energy conservation measures into the proposed project, unless safety or technical feasibility considerations take precedence:</p> <ul style="list-style-type: none"> • Natural day lighting through the use of windows and skylights. • Automated occupancy sensors in structures that automatically shut off lights when rooms are unoccupied. • Participation in PG&E energy efficiency rebate programs (e.g., air conditioning, gas heating, refrigeration, and lighting). • High-efficiency clothes washers and dishwashing machines. • Re-circulating hot water systems. • Tankless water heaters. 	<p>Less than significant impact.</p>

SECTION 3: PROJECT DESCRIPTION

This section describes the proposed San Ramon City Center Project (proposed project) that is evaluated in this Draft Subsequent Environmental Impact Report (DSEIR). Descriptions of the proposed project’s regional and planning context, objectives, and background are included, in addition to a discussion of required project approvals and entitlements. The City of San Ramon and Sunset Development Company are the co-proponents of the proposed project, and the City is the lead agency with discretionary authority over the proposed project.

3.1 - Project Location and Setting

3.1.1 - Location

The proposed project is located within the City of San Ramon in Contra Costa County, California (Exhibit 3-1). The project site is composed of four parcels totaling 43.65 acres¹ located on all four quadrants of the intersection of Bollinger Canyon Road and Camino Ramon (Exhibit 3-2). The four parcels that constitute the project site and their characteristics are summarized in Table 3-1.

Table 3-1: Parcel Summary

Parcel No.	Acreage	Existing Uses	Parcel Boundaries
1A	14.27	Undeveloped land; surface parking area for Bishop Ranch 1	Bishop Ranch 1 entrance road (west), Bollinger Canyon Road (north); Bishop Ranch 1 East roadway (east and south)
1B	3.52	Surface parking area for Bishop Ranch 1	Chevron Park (west), Bollinger Canyon Road (north); Bishop Ranch 1 entrance road; Bishop Ranch 1 structure (south)
2	14.57	Bishop Ranch 2	Sunset Drive (west); Bishop Drive (north); Camino Ramon (east); Bollinger Canyon Road (south)
3A	11.29	Undeveloped land	Camino Ramon (west); Bishop Ranch 3 parking structure (north); Iron Horse Trail (east); Bollinger Canyon Road (south)
	43.65		

Source: Sunset Development Company, 2007.

Sunset Development Company owns the entirety of Parcels 1B and 2 and 6.71 acres of Parcel 1A; the City of San Ramon owns Parcel 3A and 7.56-acres of Parcel 1A. Sunset Development Company has an option to repurchase and develop the City-owned 7.56 acres of Parcel 1A.

¹ The 43.65 acres includes 4.56 acres of internal roadways and driveways; the actual developable area is 39.09 acres. For the purposes of this DSEIR, 43.65 acres will be used as the project site acreage; however, for the purposes of calculating Floor Area Ratio, 39.09 acres will be used.

The Assessor's Parcel Numbers for the project site are 213-133-063, 213-133-086, 213-120-010, -011, -012, -013, and -014. The project site is located on the Diablo, California, United States Geologic Survey 7.5-minute topographical map, Township 2 South, Range 1 West, Unsectioned.

3.1.2 - Existing Conditions

The existing conditions of each individual parcel are described below. Photographs of the use of each parcel are shown in Exhibits 3-3a through 3-3e.

Parcel 1A

Parcel 1A consists of 14.27 acres of undeveloped land and developed parking areas associated with Bishop Ranch 1. The northern portion of Parcel 1A contains approximately 7.56 acres of undeveloped City-owned, rectangular-shaped property. This land contains ruderal vegetation, with ornamental landscaping surrounding the property on all four sides. This portion of the parcel contains fill imported from other nearby parcels that have been developed. The southern 6.71-acre portion of Parcel 1A contains parking areas associated with Bishop Ranch 1. The parking areas are characterized as at-grade, asphalt-paved with landscaped islands and freestanding lighting. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 East roadway.

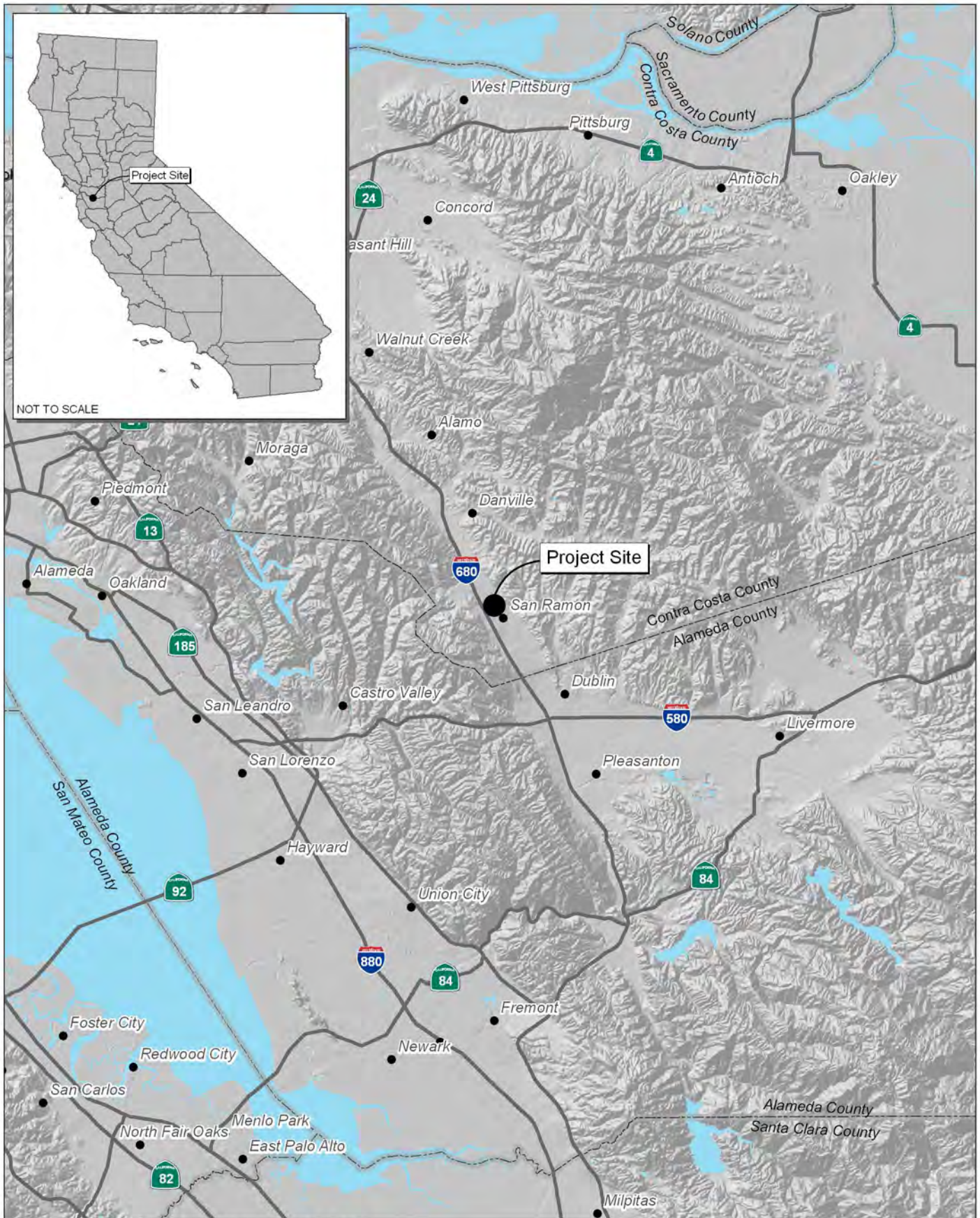
Sunset Development has an existing entitlement to develop its portion of Parcel 1A as a 328,220-square-foot office complex in accordance with the previously approved Chevron Park Annexation and Development Agreement. This entitlement was originally granted to Chevron Corporation, the previous owner of the property. Sunset Development subsequently acquired the entitlement when it purchased the Bishop Ranch 1 property.

Parcel 1B

Parcel 1B consists of approximately 3.52 acres of a developed parking area associated with Bishop Ranch 1. The parking area is characterized as at-grade, asphalt-paved with landscaped islands and freestanding lighting. Ornamental landscaping surrounds the parcel on the west, north, and east sides. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 entrance road.

Parcel 2

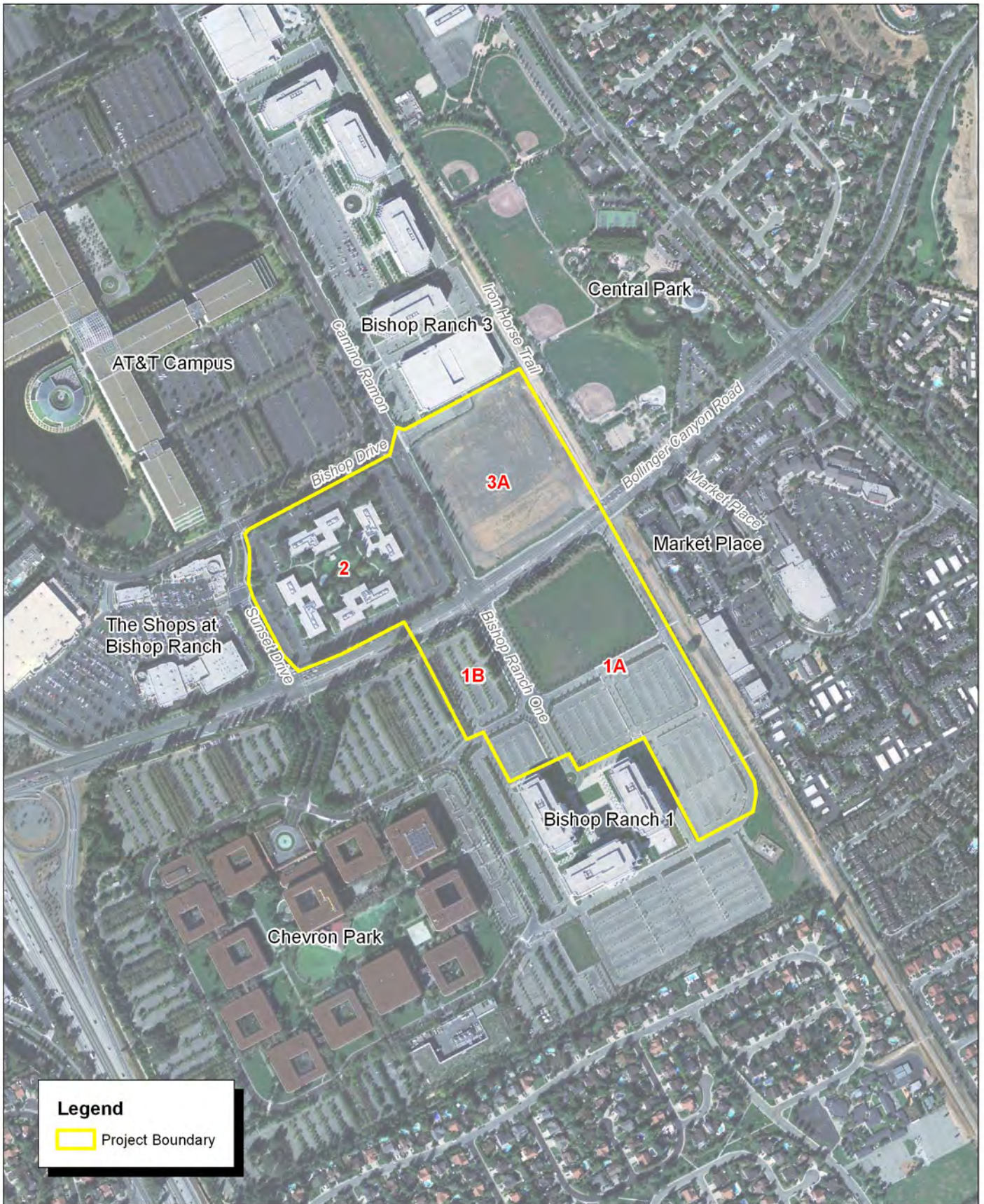
Parcel 2 consists of the existing 14.57-acre Bishop Ranch 2 office complex. Bishop Ranch 2 contains 194,652 square feet of office space spread among four multi-story office structures with an interior turf courtyard landscaped area. Parking areas are located around the perimeter of the parcel and are characterized as at-grade, asphalt-paved areas with landscaped islands and freestanding lighting. Ornamental landscaping is present along its frontages with Sunset Drive, Bishop Drive, Camino Ramon, and Bollinger Canyon Road. Sidewalks are present along its entire frontage with Sunset Drive and portion of its frontage with Bishop Drive.



Source: Census 2000 Data, The CaSIL, MBA GIS 2007.

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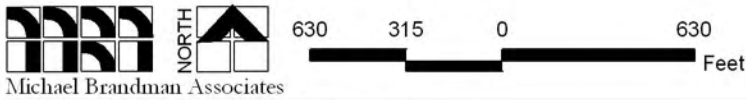
Exhibit 3-1 Regional Location Map



Legend

Project Boundary

Source: Terraserver.



Michael Brandman Associates
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**Exhibit 3-2
 Local Vicinity Map
 Aerial Base**



Parcel 3A with Chevron Park in background.



Eastern portion of Parcel 3A and Iron Horse Trail.



Western portion of Parcel 3A.



Parcel 3A as viewed from Camino Ramon.

Source: Michael Brandman Associates, 2006.



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Exhibit 3-3a Site Photographs

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Parcel 3A as reviewed from northeastern corner.



Parcel 3A as viewed from southeastern corner.



Bishop Ranch 2 as viewed from Bishop Ranch 3 parking structure.



Southwestern portion of Bishop Ranch 2.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Exhibit 3-3b Site Photographs

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Northwestern portion Bishop Ranch 2.



Northern portion of Bishop Ranch 2.



Bishop Ranch 1 Entrance at Bollinger Canyon Road.



Bishop Ranch 1 parking area on Parcel 1B.

Source: Michael Brandman Associates, 2006.

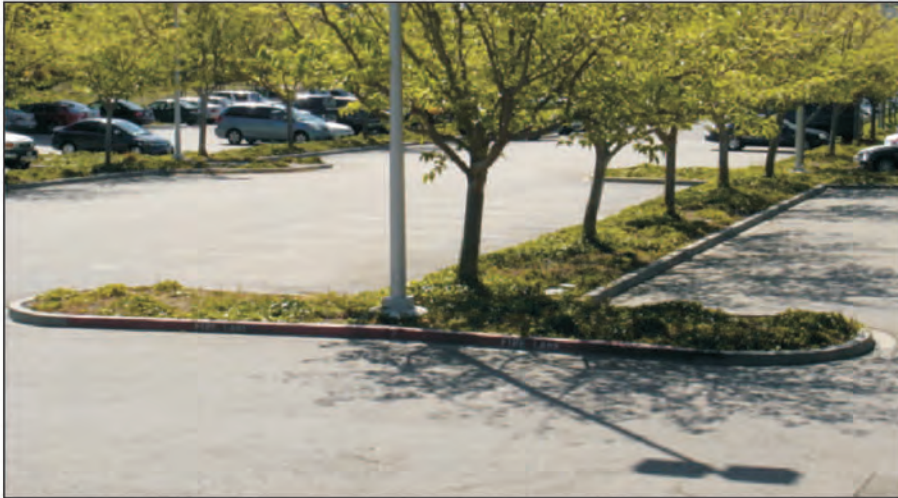


Michael Brandman Associates

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Exhibit 3-3c Site Photographs

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Bishop Ranch 1 parking area on Parcel 1B.



Bishop Ranch 1 parking area on Parcel 1B.



Undeveloped portion of Parcel 1A and the Bishop Ranch 1 perimeter road.



Undeveloped portion of Parcel 1A with Bishop Ranch 1 in the background.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Exhibit 3-3d Site Photographs

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Undeveloped portion of Parcel 1A.



Undeveloped portion of Parcel 1A with Bishop Ranch 3 in the distance.



Bishop Ranch 1 parking area on Parcel 1A.



Bishop Ranch 1 parking area on Parcel 1B.

Source: Michael Brandman Associates, 2006.



Michael Brandman Associates

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Exhibit 3-3e Site Photographs

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Parcel 3A

Parcel 3A is an undeveloped, 11.29-acre, City-owned parcel containing ruderal vegetation. The parcel contains fill imported from other nearby parcels that have been developed. Ornamental landscaping is present along its frontage with Camino Ramon. Sidewalks are present along its frontages with Camino Ramon and Bollinger Canyon Road. The site is used for temporary parking and special events such as car shows and festivals.

3.1.3 - Surrounding Land Uses

A summary of surrounding uses for each parcel is provided in Table 3-2.

Table 3-2: Surrounding Land Use Summary

Parcel No.	Surrounding Land Uses			
	West	North	East	South
1A	Bishop Ranch 1 office structure and Bishop Ranch 1 entrance road; Parcel 1B	Bollinger Canyon Road; Parcel 3A	Iron Horse Trail; Market Place commercial uses (i.e., Marriot Residence Inn and Orchard Supply Hardware); Reflections Condominiums	Bishop Ranch 1 East roadway; Bishop Ranch 1 surface parking area; single-family residential uses
1B	Chevron Park	Bollinger Canyon Road; Parcel 2	Bishop Ranch 1 entrance road; Parcel 1A	Bishop Ranch 1 office structure; Bishop Ranch 1 surface parking areas
2	Sunset Drive; Shops at Bishop Ranch	Bishop Drive; AT&T campus	Camino Ramon; Parcel 3A	Bollinger Canyon Road; Chevron Park; Parcel 1B
3A	Camino Ramon	Bishop Ranch 3 parking structure; Bishop Ranch 3 office structure	Iron Horse Trail; Watson Canyon Drainage; Central Park	Bollinger Canyon Road; Parcel 1A; Bishop Ranch 1 office structure

Source: Michael Brandman Associates, 2007.

3.1.4 - Land Use Designations

The City of San Ramon General Plan and San Ramon Zoning Ordinance govern land use on the four parcels comprising the project site. The General Plan and Zoning Ordinance designations for each parcel are summarized in Table 3-3. The existing uses of each parcel are consistent with the applicable General Plan and Zoning Ordinance designation. The Administrative Office zoning district has a height limit of 55 feet; however, the Height Overlay allows for a maximum height of 75 feet if building architecture incorporates a varying roof plane to add variation to the structure’s appearance.

Table 3-3: Land Use Designation Summary

Parcel No.		General Plan Designation	Zoning Ordinance Designation
1A	7.56 acres*	Mixed Use	City Center Mixed Use (CCMU)
	6.71 acres**	Office	Administrative Office, Height Overlay (OA-H)
1B		Mixed Use	City Center Mixed Use (CCMU)
2		Mixed Use	City Center Mixed Use (CCMU)
3A		Mixed Use	City Center Mixed Use (CCMU)
* City-owned portion ** Sunset Development-owned portion Source: Michael Brandman Associates, 2007.			

3.2 - Project Characteristics

3.2.1 - Project Background

The concept for a “City Center” project dates back to the mid-1980s during the early years of the City of San Ramon. The City’s first General Plan, adopted in November 1986, included what was referred to at that time as the San Ramon Downtown Specific Plan. The Downtown Specific Plan focused on the Crow Canyon Redevelopment Area, located northwest of the intersection of Crow Canyon Road and San Ramon Valley Boulevard. Both the General Plan and the Downtown Specific Plan included policies that identified the need for a downtown and called for establishing “a sense of place” by providing a center for daytime, nighttime and weekend activities and sustaining a profitable economic climate.

Several years after adoption of the Downtown Specific Plan, the City received a proposal to redevelop a significant amount of land in the Crow Canyon Redevelopment Area. That particular proposal was a mixed-use project that included major retailers, office uses, civic/public uses, and residential uses. However, the project failed to proceed because of the lack of unanimity by the policy makers at that time, since the project would have required a significant amount of land to be assembled.

In 1991, the City initiated its update to the General Plan that was adopted in 1995. That 1995 General Plan continued to include policies that referenced the need for a City Center but changed the location to the area along Bollinger Canyon Road.

Sunset Development submitted a proposal to develop a City Center on approximately 40 acres of land around the intersection of Camino Ramon and Bollinger Canyon Road in early 1997. The proposed project would have provided a mixed-use development that included retail, office, civic, and cultural uses. For various reasons, that concept failed to materialize. A subsequent proposal was made and approved that resulted in the City acquiring Parcel 3A, the approximately 11-acre parcel at the northeast quadrant of Camino Ramon and Bollinger Canyon Road.

In 2000, the City processed and approved the development of Bishop Ranch 1, south of the intersection of Camino Ramon and Bollinger Canyon Road. As part of that approval, the City was able to acquire 7 acres of Parcel 1A at the southeastern quadrant of the intersection with the intent of developing a City Center on the site. With the acquisition of this parcel, the City had ownership of 18 acres of undeveloped land in central San Ramon on a major arterial corridor close to Interstate 680 (I-680).

The City embarked on a visioning process to create a plan for the City Center. The City hired a consultant and appointed an 18-member citizens task force to work with its staff and the consultant. After numerous public workshops and plan options, the process resulted in a new and more detailed vision for the creation of a City Center. In early 1999, the City initiated a design competition to implement this new vision. A team of architectural firms, including a construction management firm, was contracted to aid the City in implementing its new vision. Public workshops were held to solicit ideas; plan alternatives were generated; and, ultimately, a preferred plan was selected. Again, as with previous efforts, the project failed to proceed.

In March 2002, City voters approved the General Plan 2020, which identified a City Center project at the intersection of Camino Ramon and Bollinger Canyon Road and set forth a number of policies reaffirming previous policies intended to guide the development of the project. Relevant policies include:

- Policy 2.4-I-13, which calls for the development of the City Center area as a cultural, recreational, and compatible retail center. Additional supporting language contemplates the City Center as a vital, vibrant gathering place containing civic, recreational, and commercial opportunities that would attract the community throughout the day and week
- Policy 4.7-I-5, which envisions the City Center has a cohesive mix of civic, compatible retail, open space uses, with an arts and entertainment focus. Additional supporting language anticipates the City Center as a vital core, with a performing arts center, library, and small scale retail
- Policy 4.8-I-17, which exempts the City Center project from height restrictions and set back requirements for vertical wall dimensions and upper stories.
- Policy 7.1-I-1, which supports the development of a City Center. Additional supporting language envisions the City Center as a “civic hub” containing a City Hall, community theater, and other public buildings, as well as compatible private buildings

The City of San Ramon General Plan EIR considered the development of a City Center-type project containing civic and commercial uses. Shortly thereafter, the City Council hired a new architectural firm and charged it with developing plans for a project known as the “City Civic Center,” which, after many public workshops and the consideration of numerous plan options, ultimately ended up being primarily a civic center focused on public facilities that would have been entirely publicly financed. As formally proposed, the City Civic Center project called for a total of 276,000 square feet of

primarily civic and small scale commercial uses, including City offices, Council Chamber, a library, a children's museum, a 1,200-seat performing arts center with a smaller 300-seat theater, 40,000 square feet of retail on Parcel 3A, and an aquatic center on Parcel 1A. A project-level Draft EIR for the project was issued in September 2003. The City Council certified the Final EIR in December 2003, but did not grant entitlements for the project concept because the City would have borne a significant financial burden that was viewed as unacceptable. (As postscript to the demise of the City Civic Center project, the City and the San Ramon Valley Unified School District joined to develop a 600-seat performing arts facility and aquatics center at Dougherty Valley High School that will be available for community use during non-school hours when the school opens at the start of the 2007–08 academic year. Additionally, a site for the Children's Discovery Museum has been identified in the City of Dublin.)

In February 2004, City staff presented options regarding the City Center as part of a budget workshop. At the end of the workshop, the City Council directed staff to explore a public-private partnership option. The consensus was that there would be more advantages than disadvantages through a partnership, particularly in terms of providing public facilities and combining resources. As part of this action, the City Council formed an oversight subcommittee to work with City staff on implementing this new direction.

To realize the public-private partnership, the City determined it was necessary to make certain amendments to the General Plan and concurrently create a new zoning district: City Center Mixed Use (CCMU). The amendments included provisions that would allow for flexibility in the design of the City Center, and they were put forth before the Planning Commission and City Council in June 2005. The Planning Commission, the City Council oversight subcommittee, and the City Council approved the amendments, which were formally adopted in October 2006.

During this process, City staff also discovered that there was an opportunity to include approximately 3.5 acres of additional land to the City Center Mixed Use area, which provided more flexibility and options in the design of the City Center. City staff also solicited Sunset Development's interest in participating with the City in designing a new City Center because of its ownership of property within the City Center Mixed Use area. Sunset Development showed a strong desire to work collaboratively with the City in generating concept plans. The City also conducted exploratory meetings with other nationally recognized retail developers such as Caruso Affiliated, Federal Realty Investment Trust, the DeBartolo Company, and others.

The City Center project analyzed in this DSEIR is the culmination of the City and Sunset Development's joint efforts.

3.2.2 - Proposed Project Overview

The City of San Ramon and Sunset Development are co-applicants for the proposed mixed use project. The project consists of 2,168,466 square feet of new construction of retail, hotel, residential,

office, and civic uses on the project site. Included in this total 194,652 square feet of existing office space will be demolished, and the project will utilize a vested un-built office entitlement of 328,220 square feet. This existing entitlement is for Parcel 1A in accordance with the terms and conditions of a Development Agreement originally granted to Chevron, and assumed by Sunset Development Company. In summary, the total square footage to be built is 2,168,466 square feet; however, the needed entitlement for the project is for a “net” of 1,645,594 square feet of mixed uses.

The intent and design of this infill project is to create a vibrant destination and promote the use of public transportation and pedestrian and bicycle modes of transportation. The proposed project consists of three components: a Plaza District on Parcels 2 and 3A, the Bishop Ranch 1A office complex on Parcel 1A, and a City Hall and Transit Center on Parcel 1B. A summary of the project components is provided in Table 3-4. Each component is described in further detail below. A context plan for the proposed project is shown in Exhibit 3-4. An illustrative site plan for the proposed project is provided in Exhibit 3-5. The tentative parcel map for the proposed project is provided in Appendix L.

Table 3-4: Project Components

Component	Use	Square Footage	Notes
Plaza District	Retail	635,042	Includes a cinema, two anchor stores, and restaurants
	Office	50,142	Space can developed as either office or retail (i.e. retail/office flex)
	Hotel	139,867	Consists of 169 rooms
	Residential	550,669	Consists of 487 high-density residential units
Bishop Ranch 1A Office Complex	Office	681,769	Three 7-story, Class A office buildings
City Hall and Transit Center	Civic	110,490	Includes a City Hall with Council Chamber, City offices, library, and police station, as well as transit center
New Construction Subtotal		2,168,466	
Bishop Ranch 2		(194,652)	City/Sunset Annexation and Development Agreement amended to allow development of Plaza District in place of Bishop Ranch 2
Office Entitlement		(328,220)	Amendment to City/Chevron (Sunset Assumption) Annexation and Development Agreement amended to allow development of Bishop Ranch 1A in place of office entitlement
Reductions Subtotal		(522,872)	
Net Project Square Footage		1,645,594	
Source: Sunset Development Company, 2007.			

3.2.3 - Project Components

Plaza District

The Plaza District would be the largest component of the proposed project, both in terms of footprint and square footage. The Plaza District would occupy Parcels 2 and 3A and would consist of seven City blocks: A, B, C, D, E, F-G, and H. Blocks A through D would be located on Parcel 2, and Blocks E through H would be located on Parcel 3A. The Plaza District would be organized around Center Street, the principal east-west roadway that would bisect the district. Three north-south streets would intersect with Center Street—West Street, Camino Ramon, and East Street—and would create three internal intersections in the Plaza District. In addition, the existing Bishop Drive would be extended from its current terminus at the Bishop Ranch 3 parking structure to loop around the east side of the Plaza District and intersect with Bollinger Canyon Road. With the exception of Camino Ramon, all streets would be private.

The heart of the Plaza District would be centered around a large pedestrian plaza, located in front of the hotel on the south side of Center Street, between West Street and Camino Ramon. The plaza would be used for seasonal programs, such as farmer’s markets during the warmer months and outdoor ice skating during the winter months. Exhibit 3-6 provides a site plan of the Plaza District. Exhibits 3-7a through 3-7h provide individual depictions of the seven blocks (A through H) within the Plaza District.

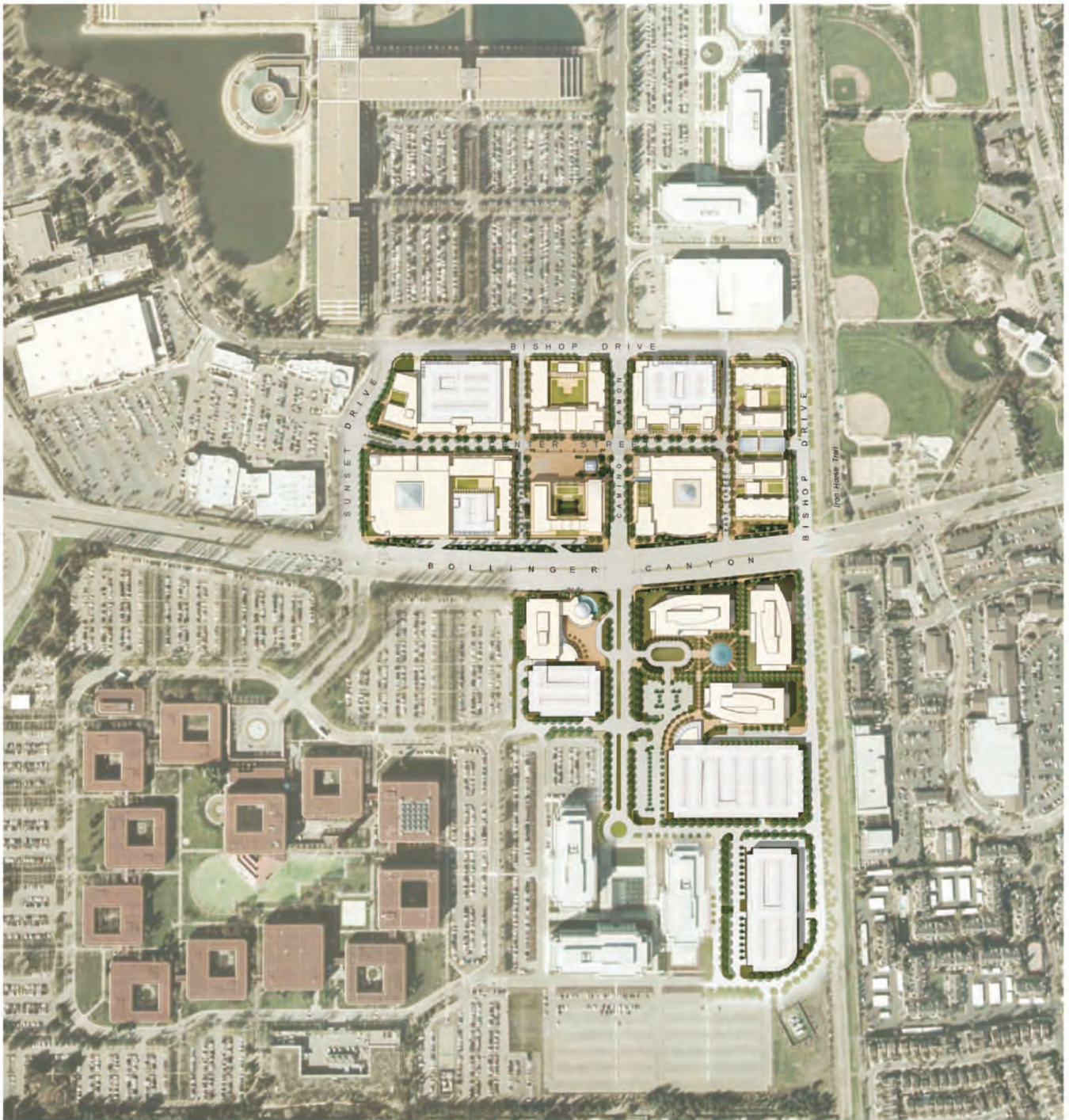
Within the Plaza District would be retail, residential, office, and hotel uses. Each is discussed in detail below.

Retail

Retail uses within the Plaza District would total 635,042 square feet and consist of two possible anchor stores, a six-screen arts cinema, and smaller inline retail uses such shops, restaurants, and spa/fitness/wellness. Table 3-5 provides a summary of the retail square footage for each of the seven Plaza District blocks.

Table 3-5: Plaza District Retail Uses Summary

Block	Retail Use	Square Footage
A	Inline Retail	65,160
B	Cinema/Inline Retail	79,525
C	Inline Retail	25,961
D	Anchor Store 1/Inline Retail	193,385
E	Inline Retail	67,440
F and G	Inline Retail	44,215
H	Anchor Store 2/Inline Retail	159,356
	Total	635,042
Source: Sunset Development Company, 2007.		



Source: Sunset Development Company, April 30, 2007.



Michael Brandman Associates

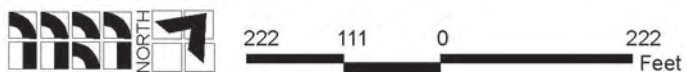
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Exhibit 3-4 Context Plan



Source: Sunset Development Company, April 30, 2007.

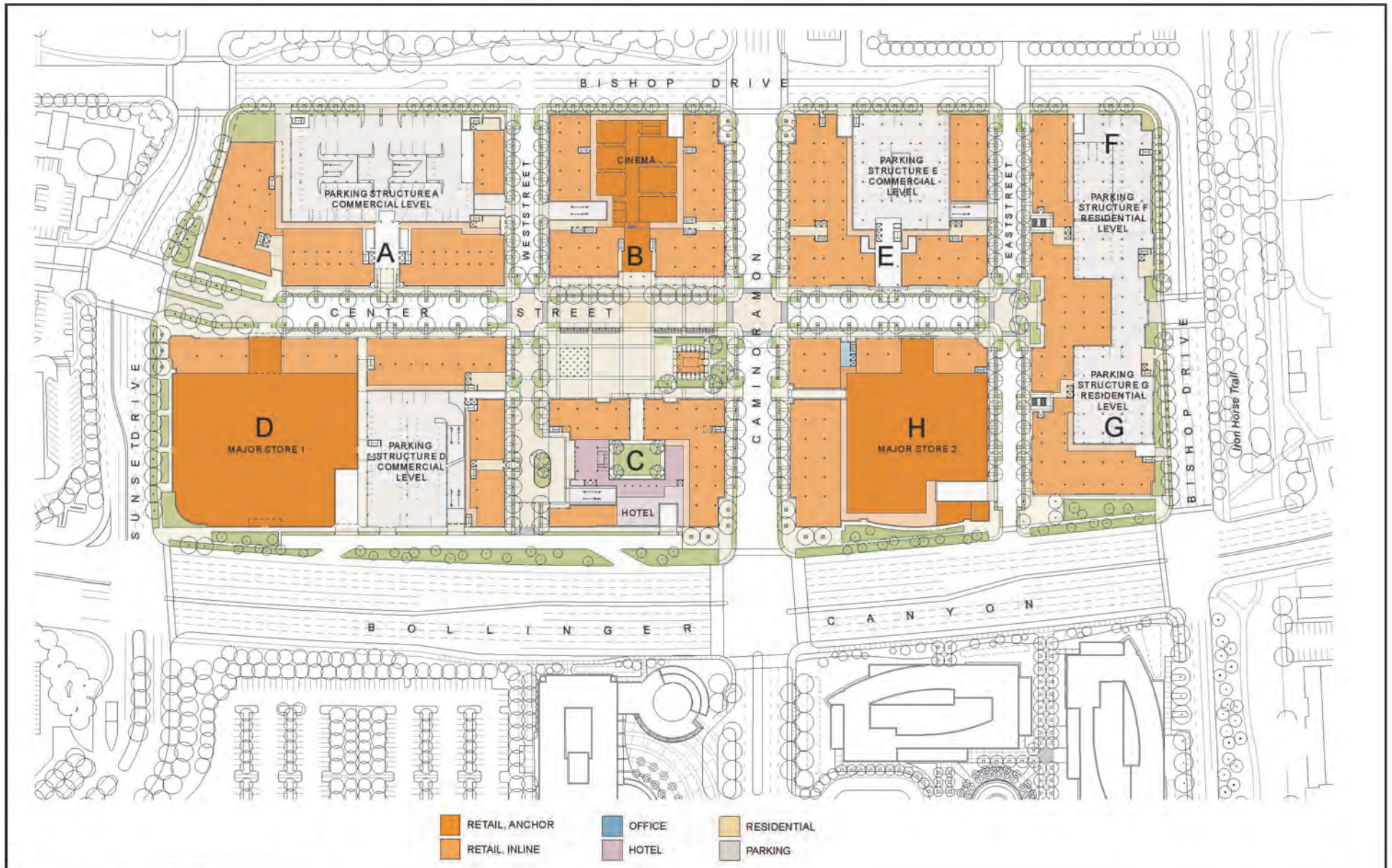


Michael Brandman Associates

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Exhibit 3-5 Illustrative Site Plan

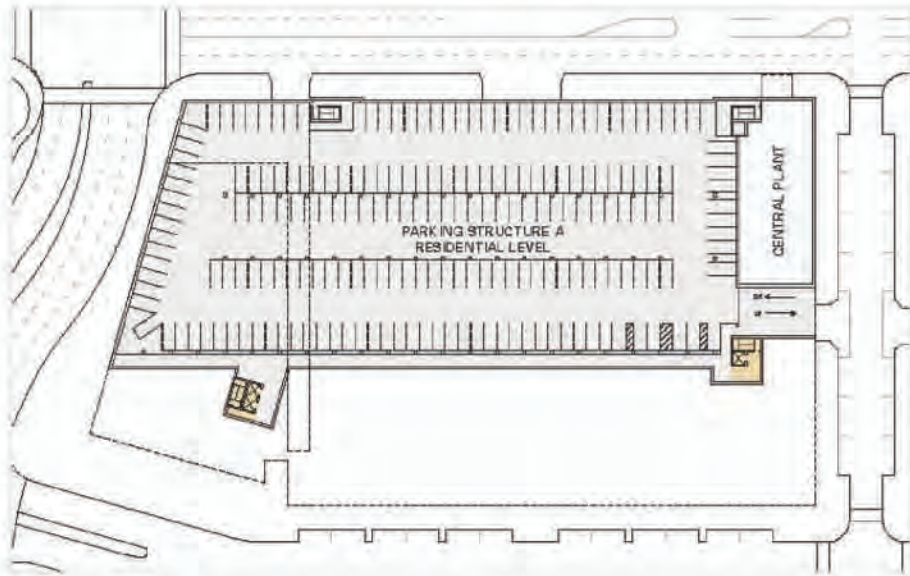
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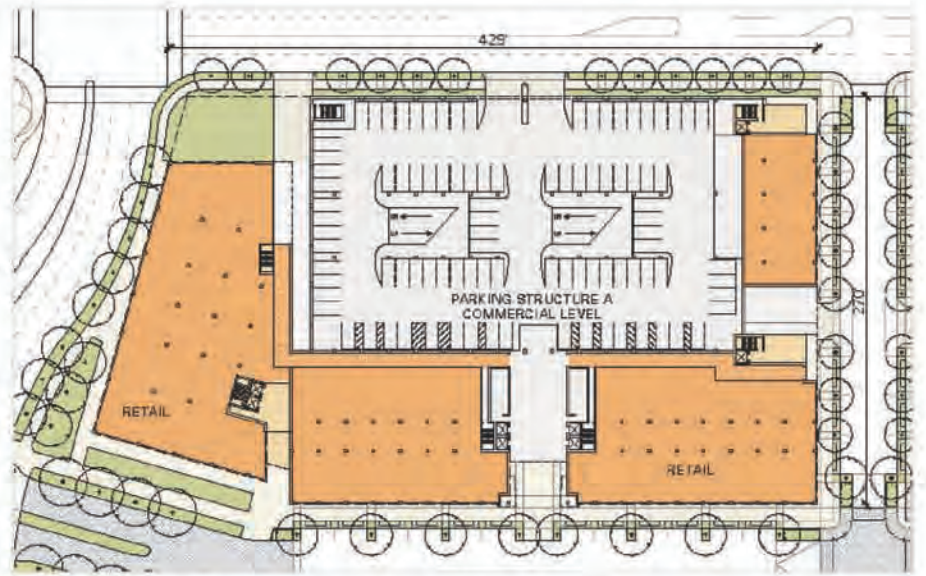
Source: Michael Brandman Associates, 2006.



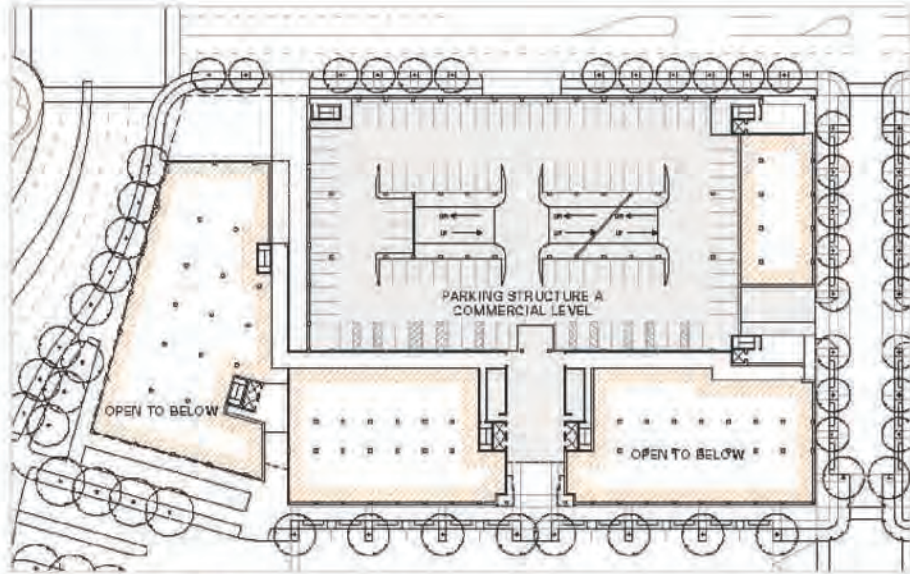
Exhibit 3-6 Plaza District



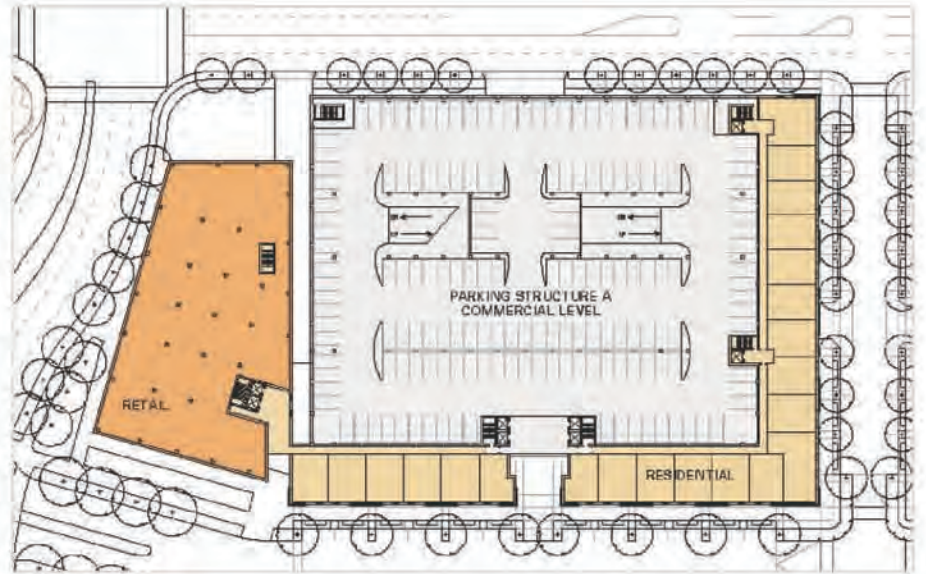
Lower Level Plan



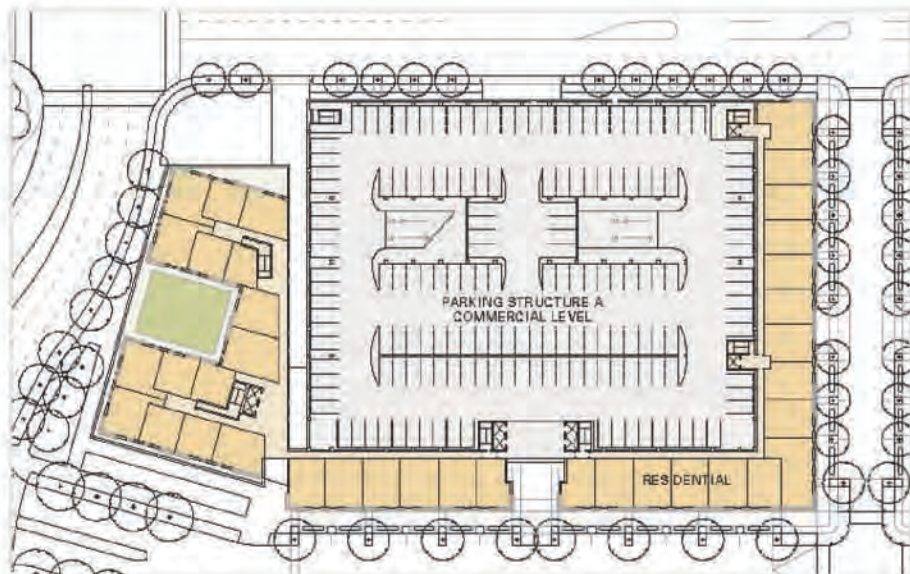
Ground Floor Plan



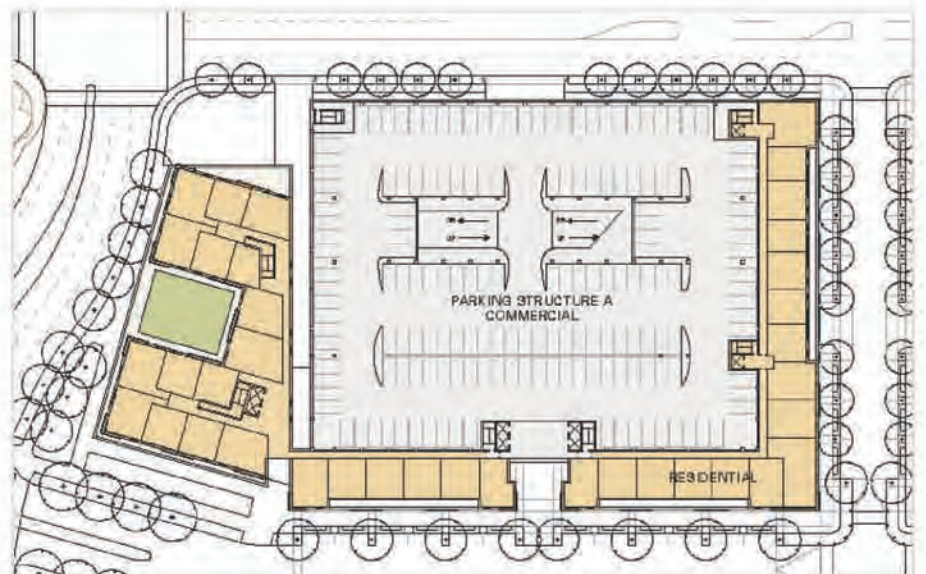
+10' Mezzanine Plan



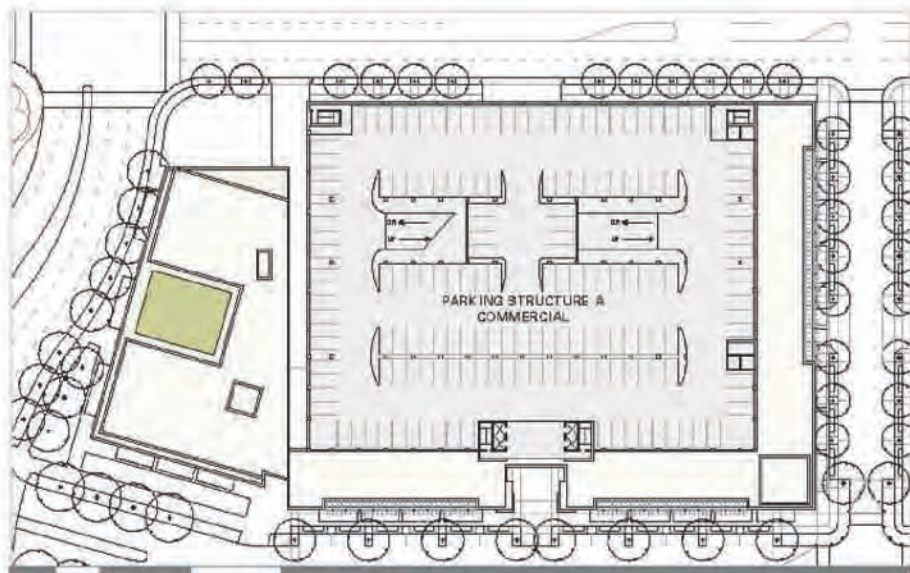
+20' Plan/+30' Plan



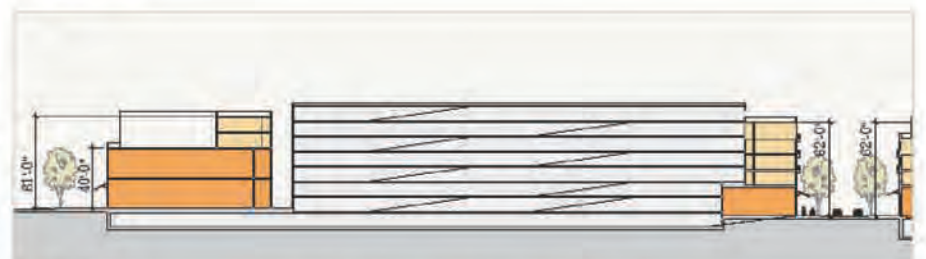
+40' Plan



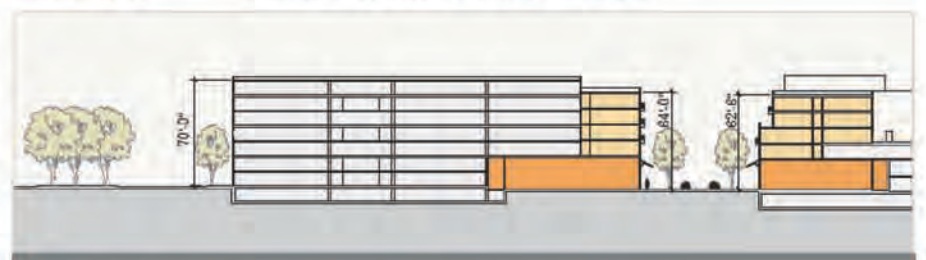
+50' Plan



+60' Plan/+70' Plan



Section A-A Building heights are measured from proposed finished grade.



Section B-B Building heights are measured from proposed finished grade.

Program Summary				
	AREA (NET SR)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	85,100	0	308	1,888
RESIDENTIAL	90,789	88	148	149
TOTALS	155,899	88	450	1,471



Source: Sunset Development Company, April 30, 2007.

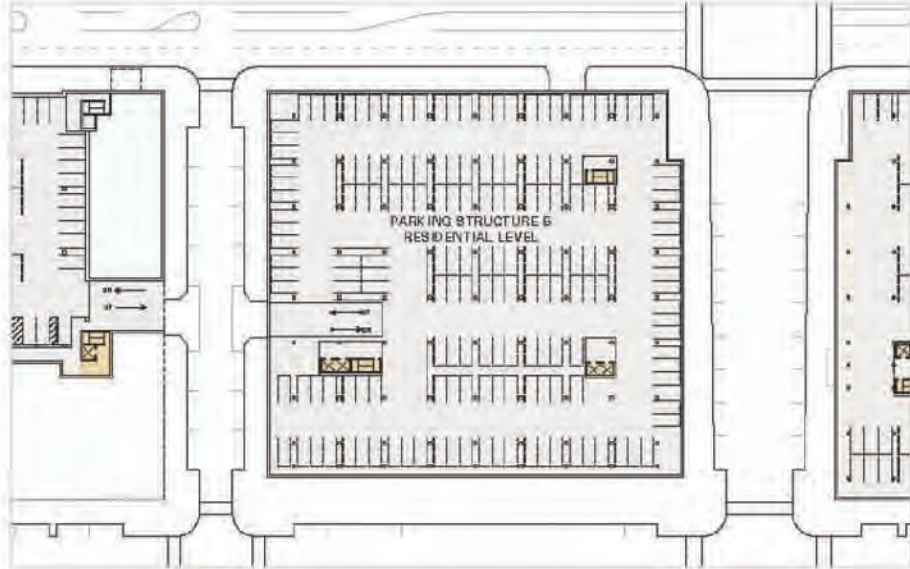


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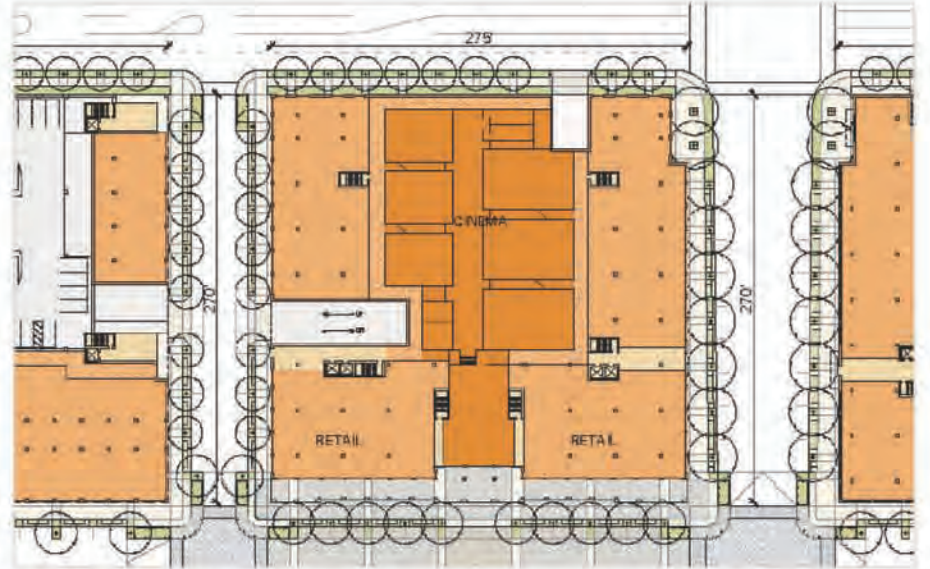
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Exhibit 3-7a
Block Plan A

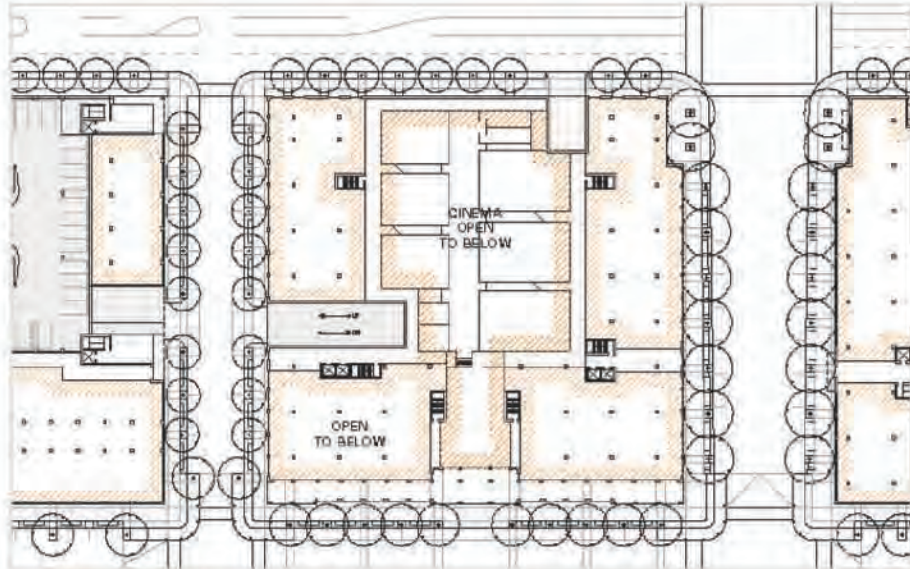
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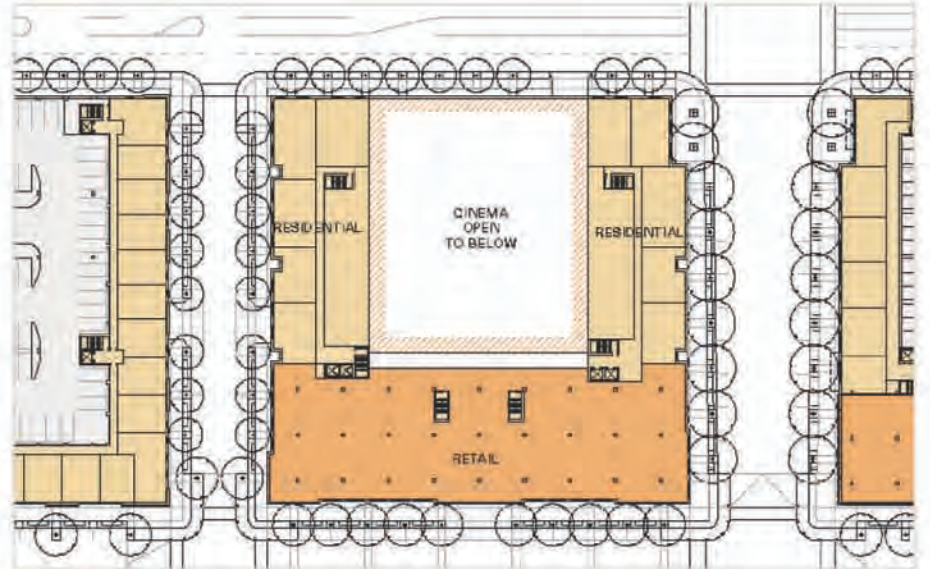
Lower Level Plan



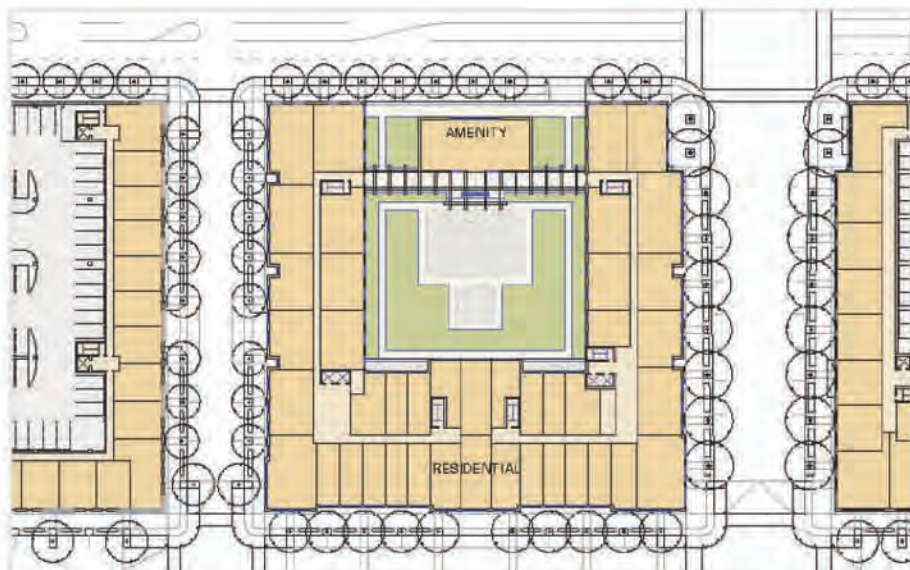
Ground Floor Plan



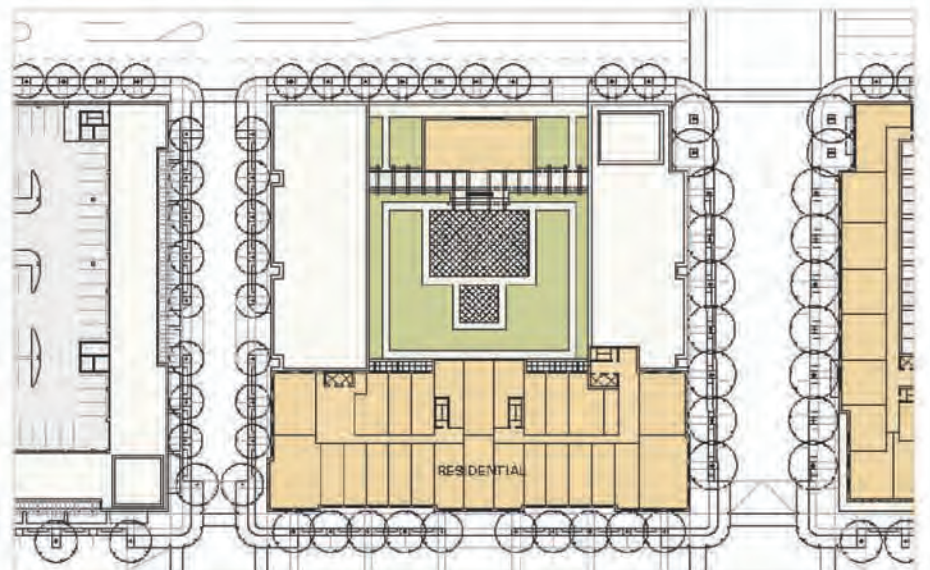
+10' Mezzanine Plan



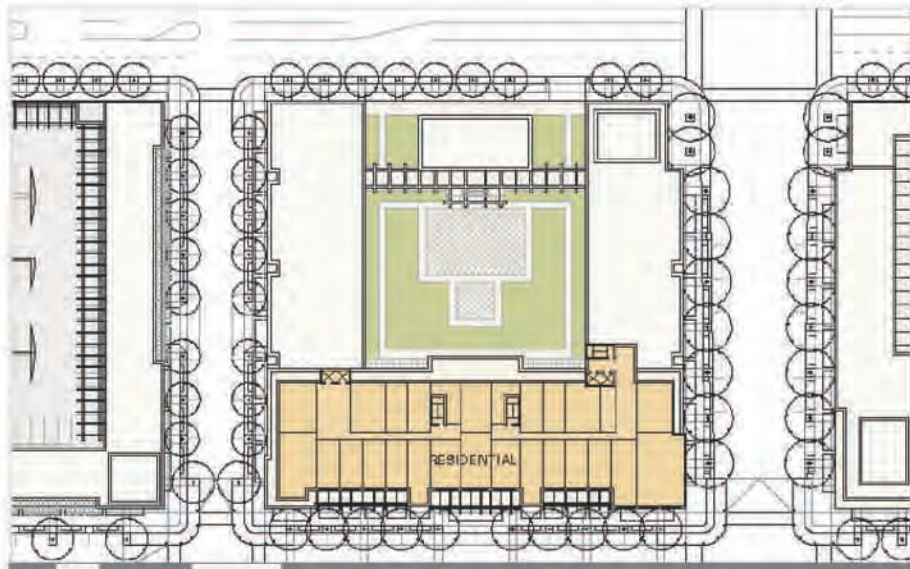
+20' Plan/+30' Plan



+40' Plan/+50' Plan



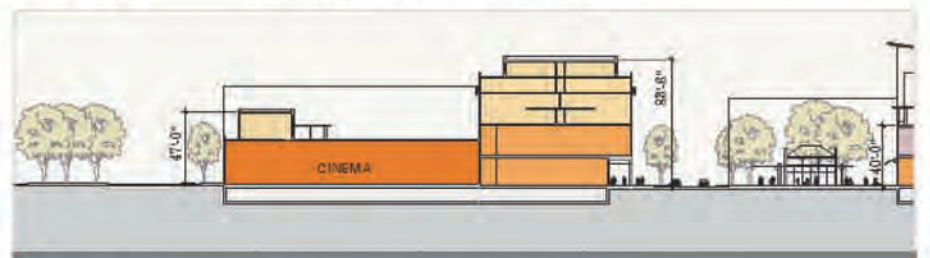
+60' Plan



+70' Plan/Penthouse



Building heights are measured from proposed finished grade.



Building heights are measured from proposed finished grade.

Program Summary				
	AREA (NET SF)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	79,525	0	485	0
RESIDENTIAL	108,550	96	172	171
TOTALS	188,075	96	172	171



Source: Sunset Development Company, April 30, 2007.

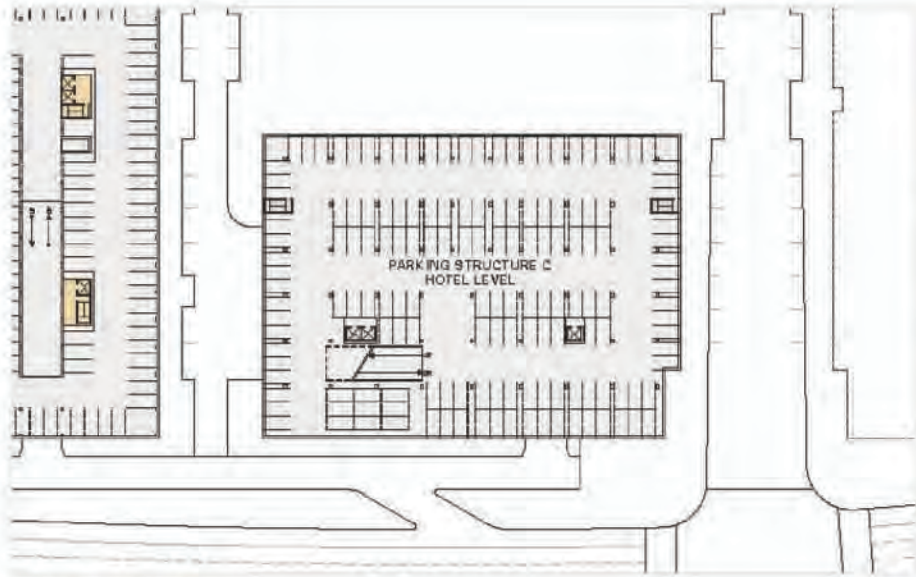


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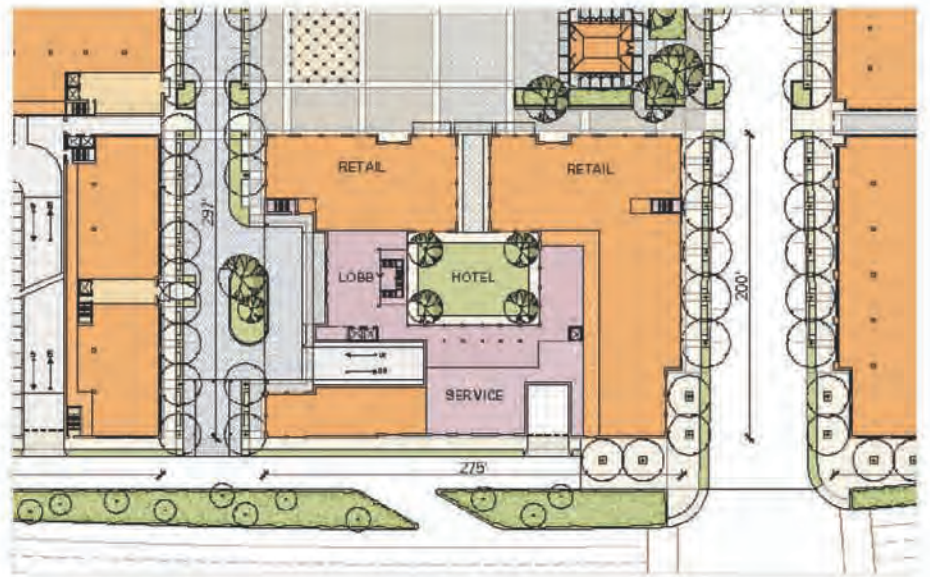
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Exhibit 3-7b
Block Plan B

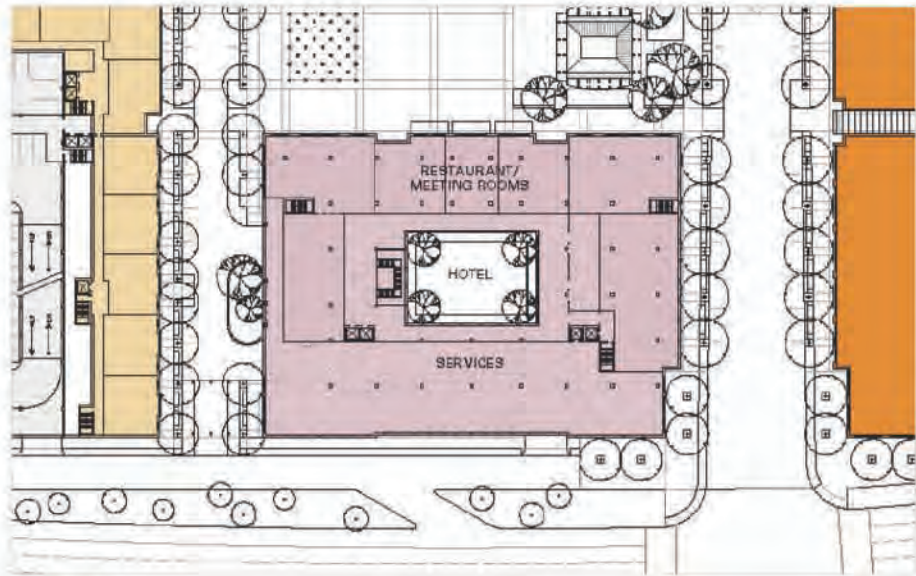
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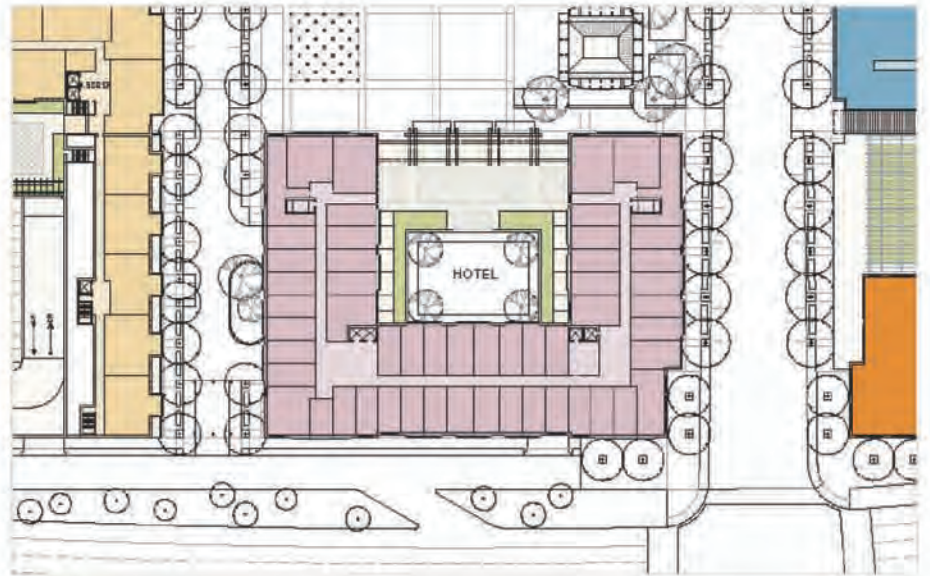
Lower Level Plan



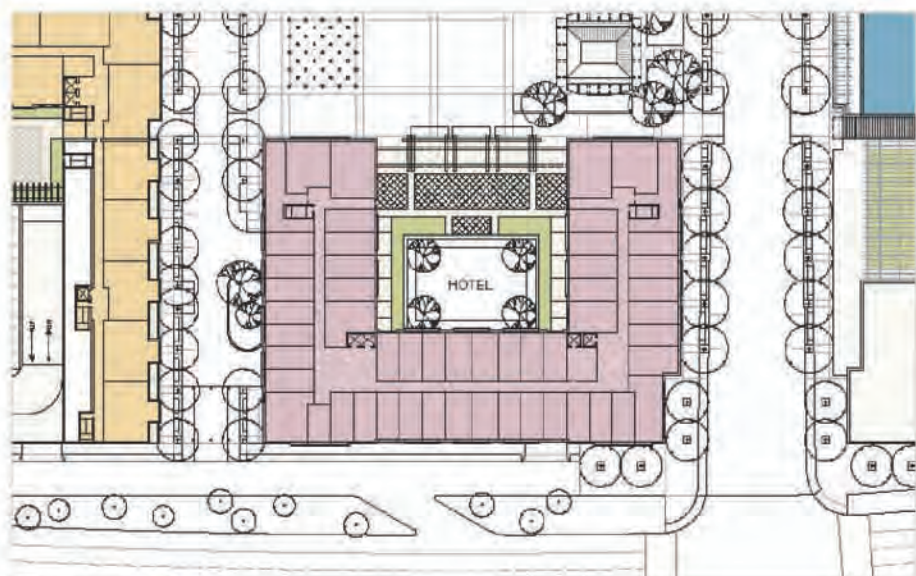
Ground Floor Plan



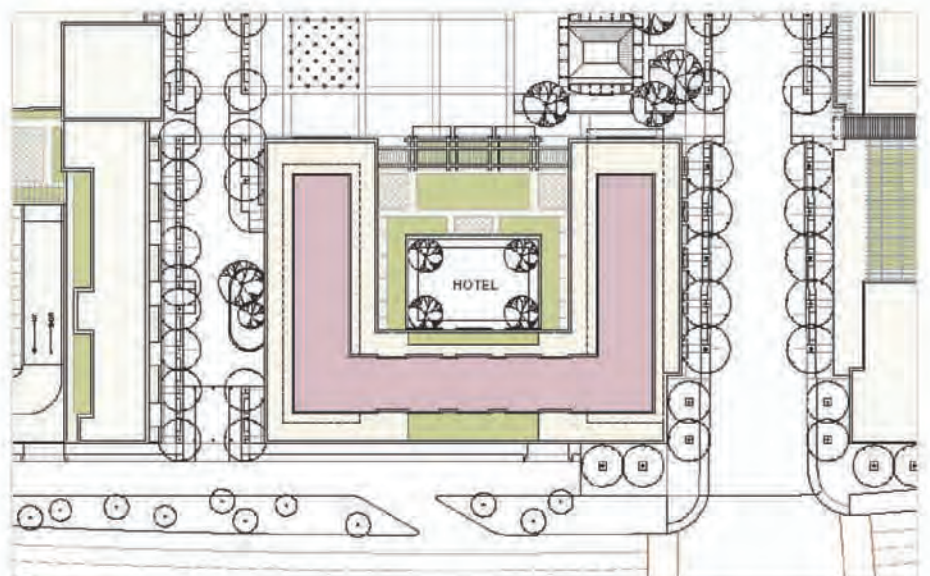
+20' Plan



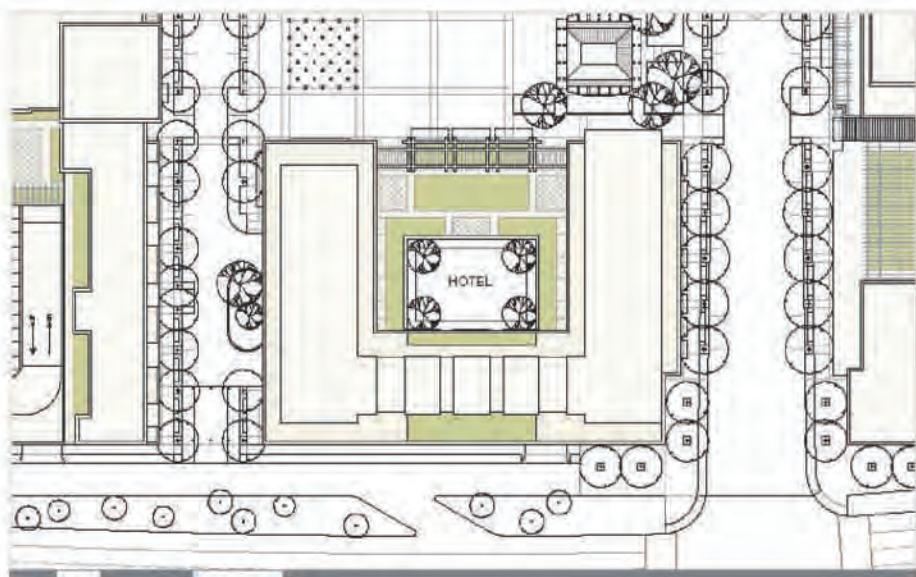
+40' Plan



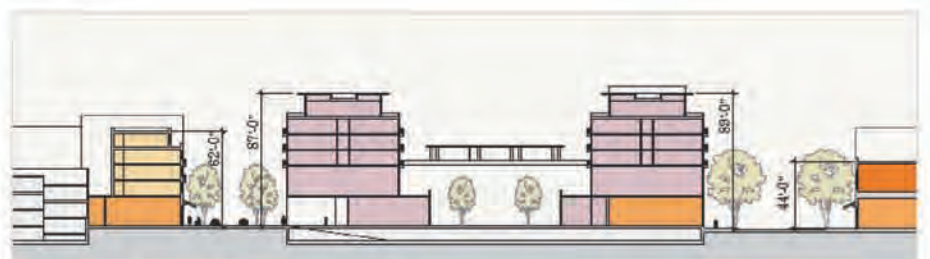
+50' Plan/+60' Plan



+70' Plan

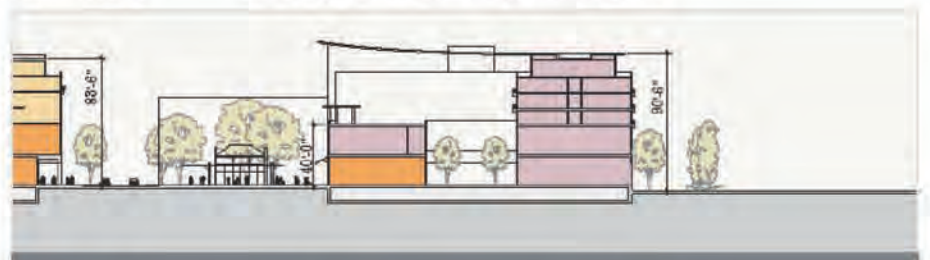


+80' Plan



Section A-A

Building heights are measured from proposed finished grade.



Section B-B

Building heights are measured from proposed finished grade.

Program Summary

	AREA (NET SF)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	25,261	0	0	0
HOTEL	189,887	0	182	180
TOTALS	215,148	0	182	180

Key Plan



Source: Sunset Development Company, April 30, 2007.

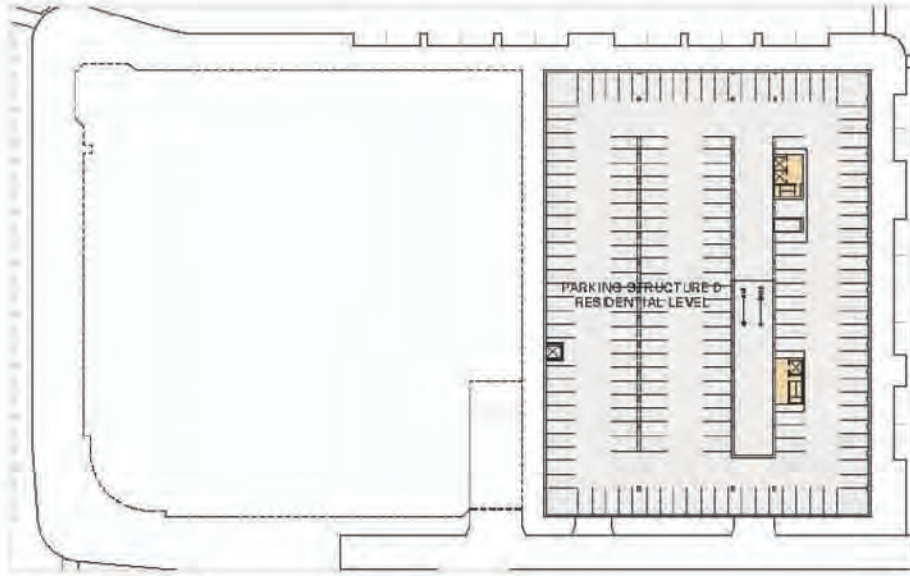


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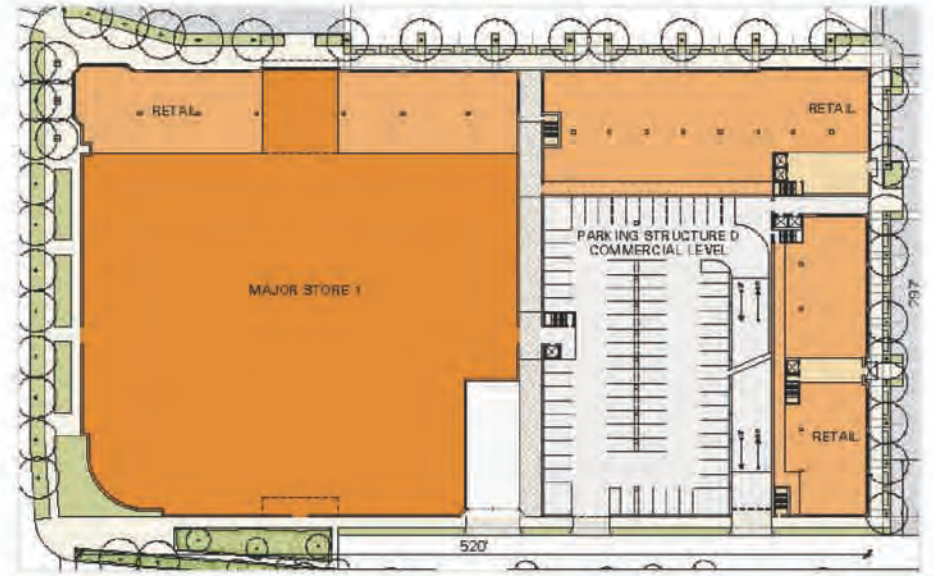
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Exhibit 3-7c
Block Plan C

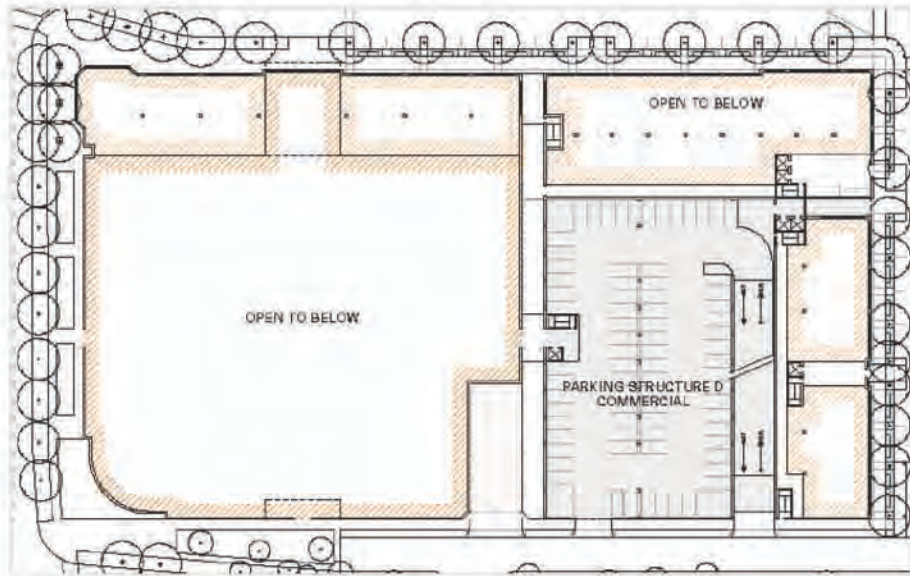
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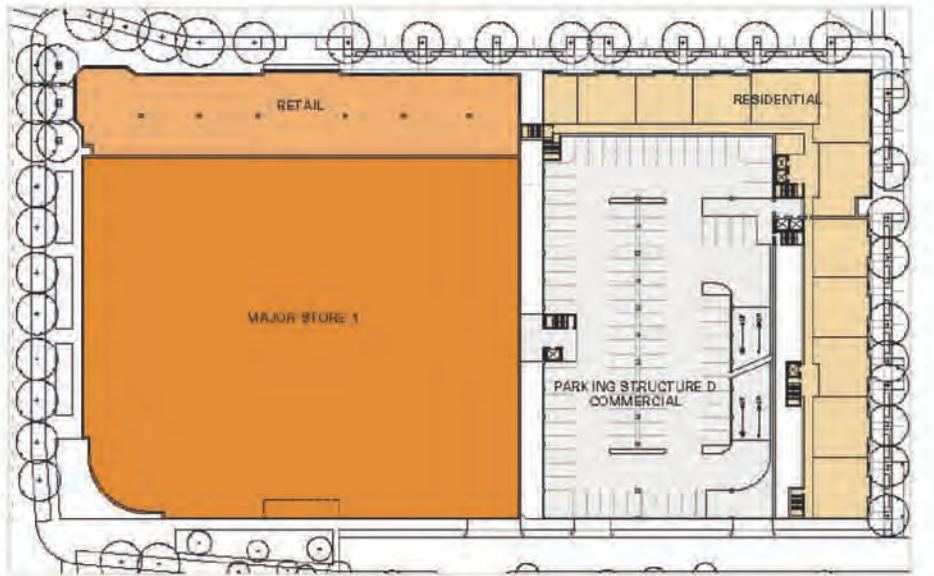
Lower Level Plan



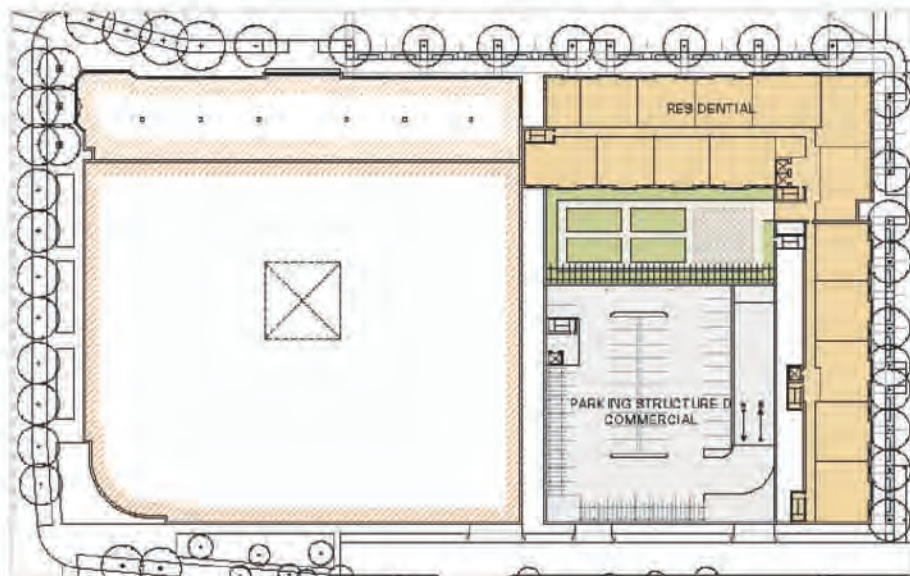
Ground Floor Plan



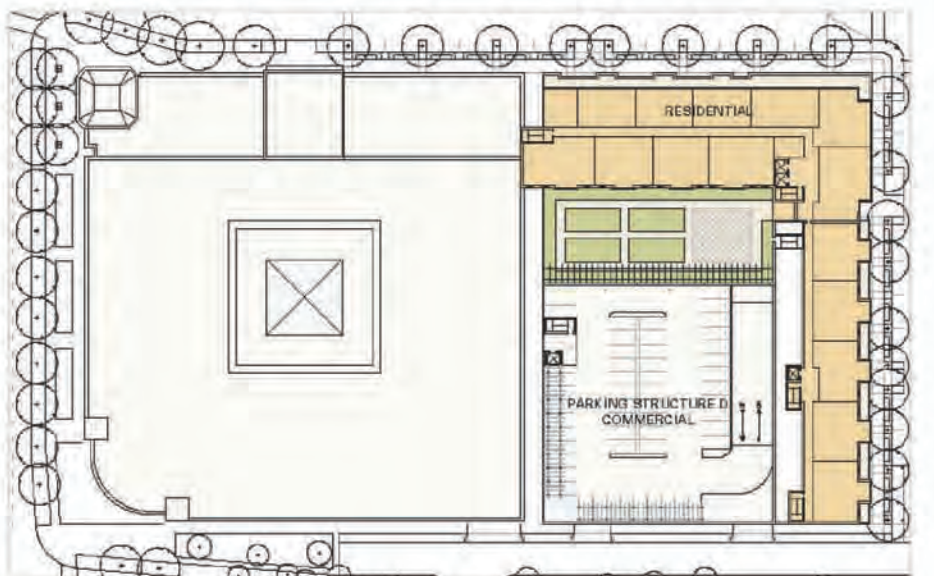
+10' Mezzanine Plan



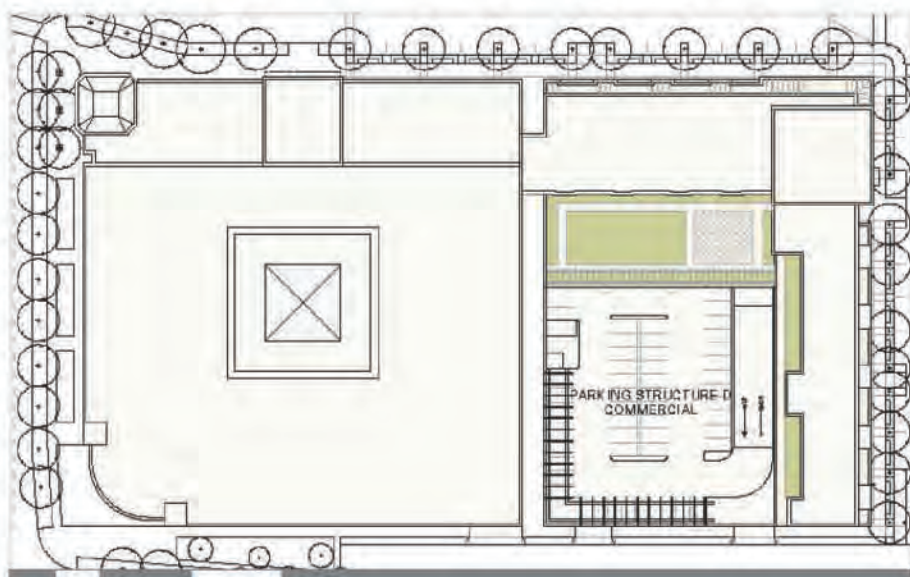
+20' Plan



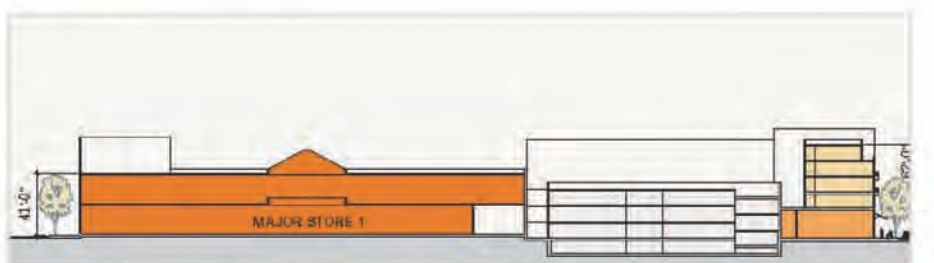
+30' Plan/+40' Plan



+50' Plan

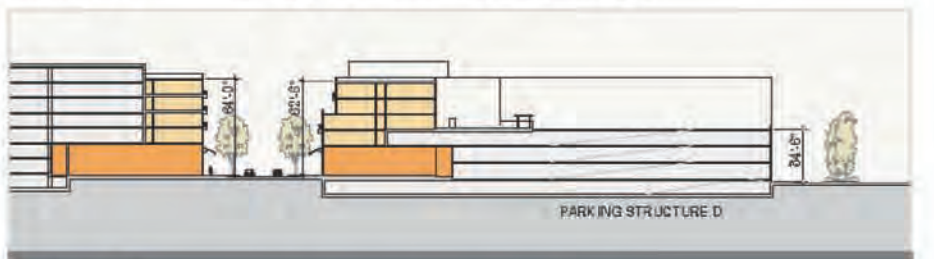


+60' Plan/Roof Plan



Section A-A

Building heights are measured from proposed finished grade.



Section B-B

Building heights are measured from proposed finished grade.

Program Summary				
	AREA (NET S.F.)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	126,285	0	812	377
RESIDENTIAL	90,482	88	149	165
TOTALS	216,767	88	961	542



Source: Sunset Development Company, April 30, 2007.

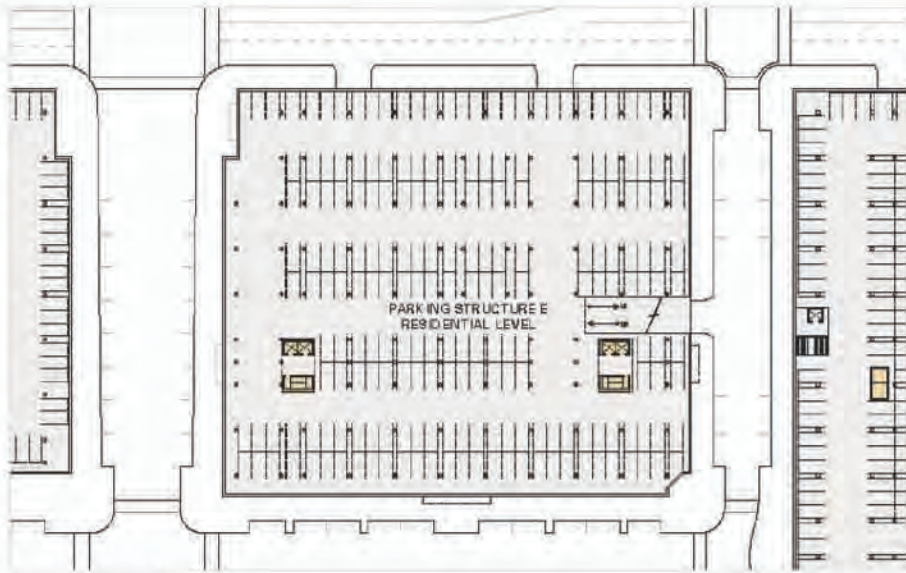


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Exhibit 3-7d
Block Plan D

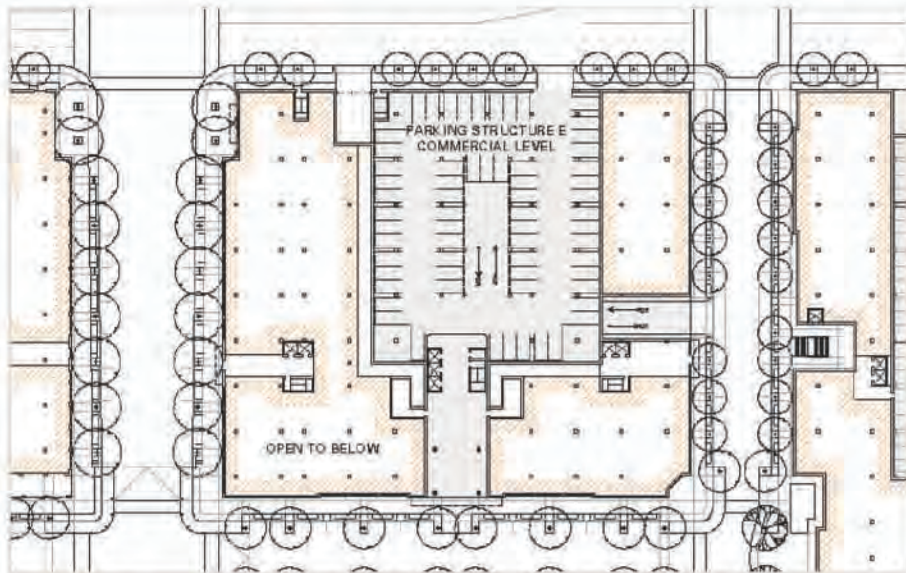
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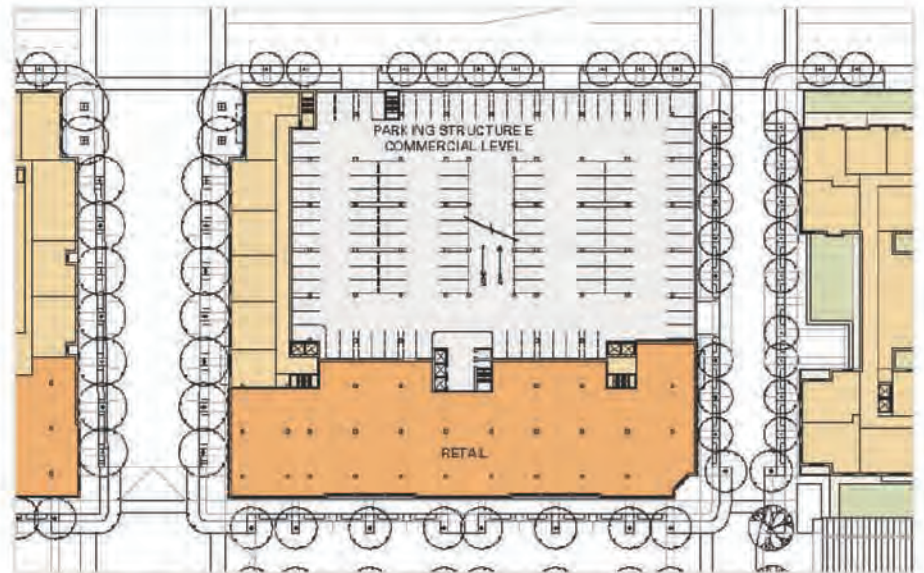
Lower Level Plan



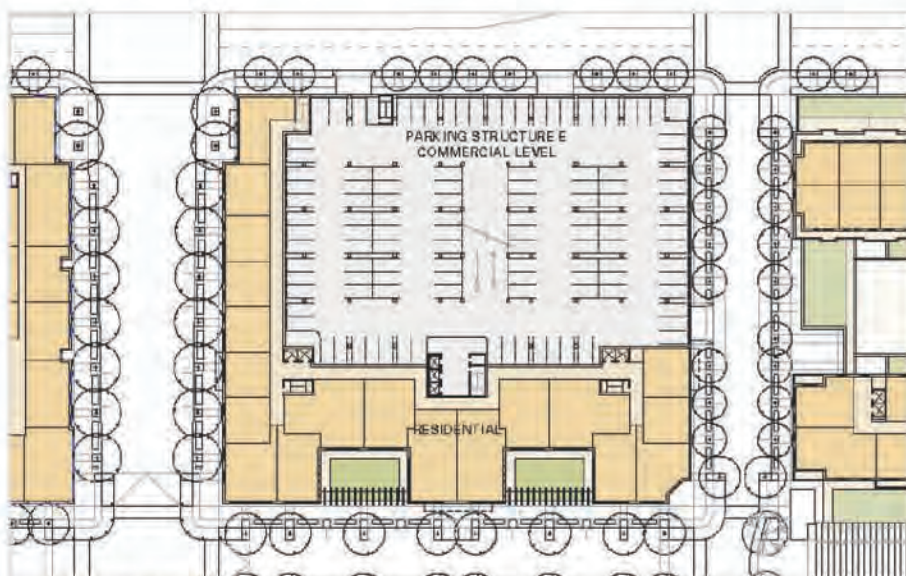
Ground Floor Plan



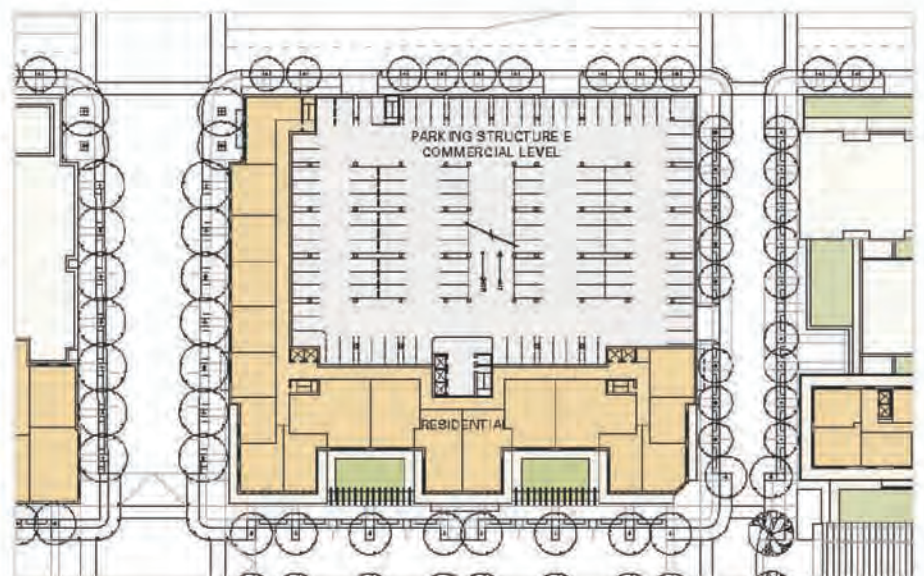
+10' Mezzanine Plan



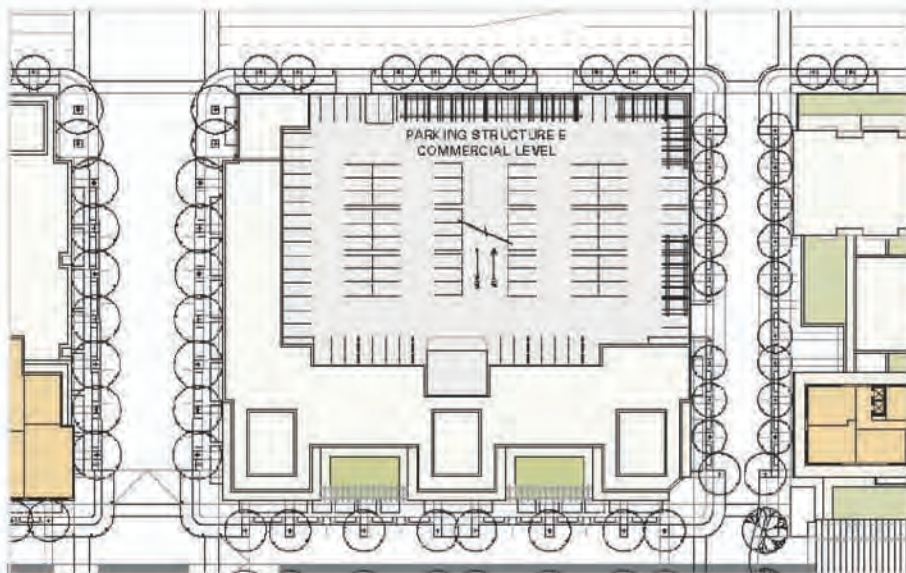
+20' Plan/+30' Plan



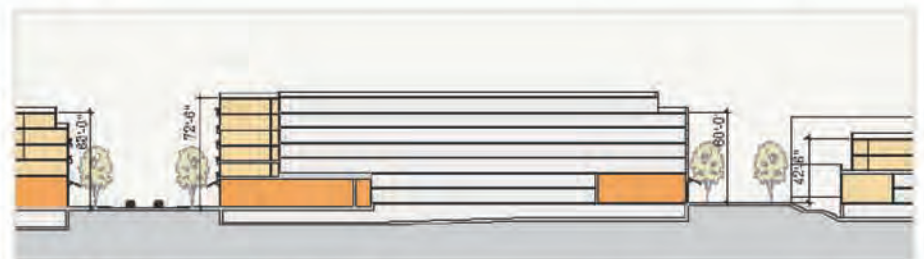
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+60' Plan

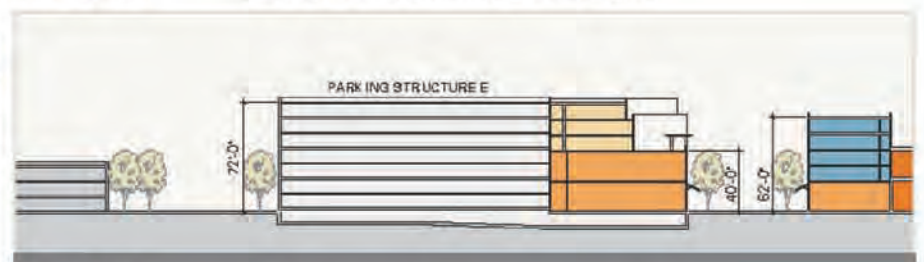


+70' Plan/Roof Plan



Section A-A

Building heights are measured from proposed finished grade.



Section B-B

Building heights are measured from proposed finished grade.

Program Summary

	AREA (NET SQ)	DWELLING LIMITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	67,440	0	205	930
RESIDENTIAL	86,532	77	189	189
TOTALS	154,092	77	494	1093

Key Plan



Source: Sunset Development Company, April 30, 2007.

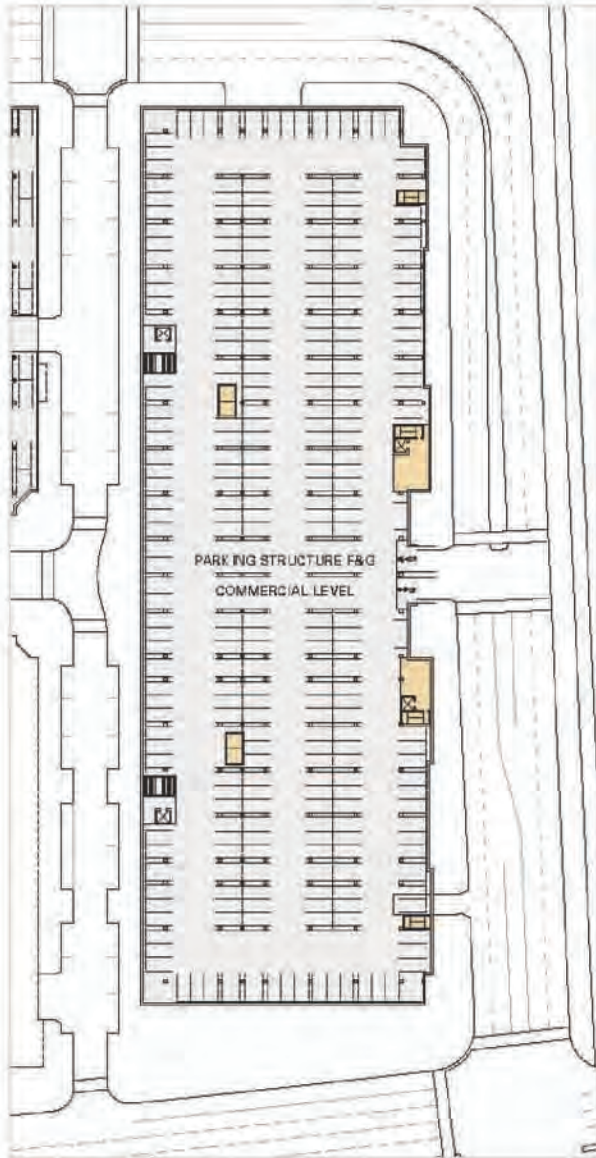


Michael Brandman Associates

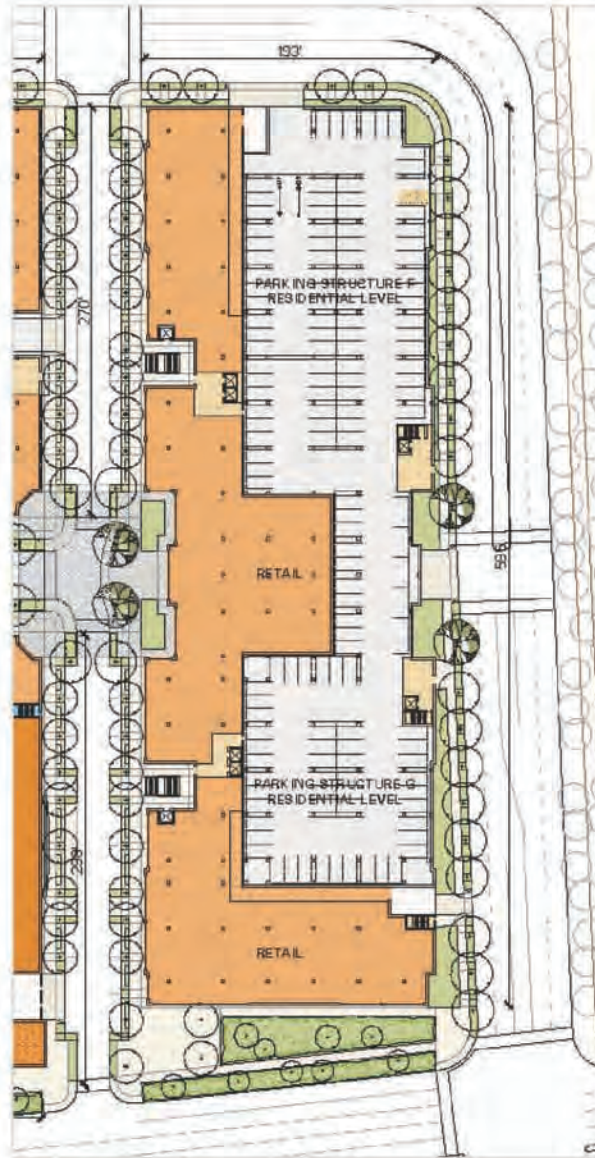
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Exhibit 3-7e
Block Plan E

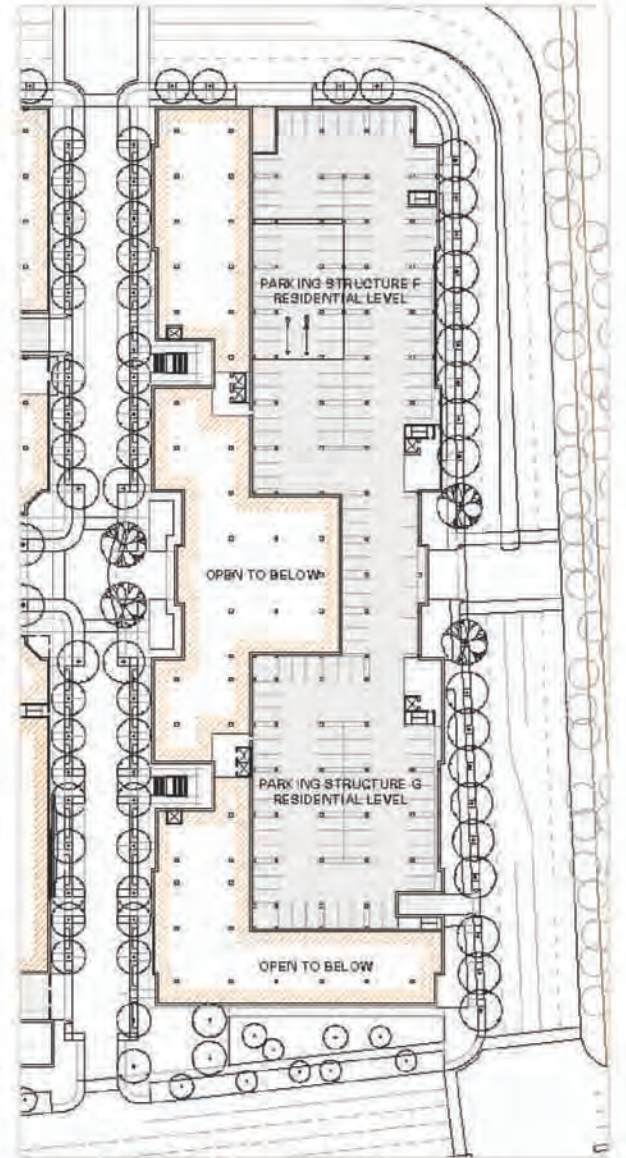
CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
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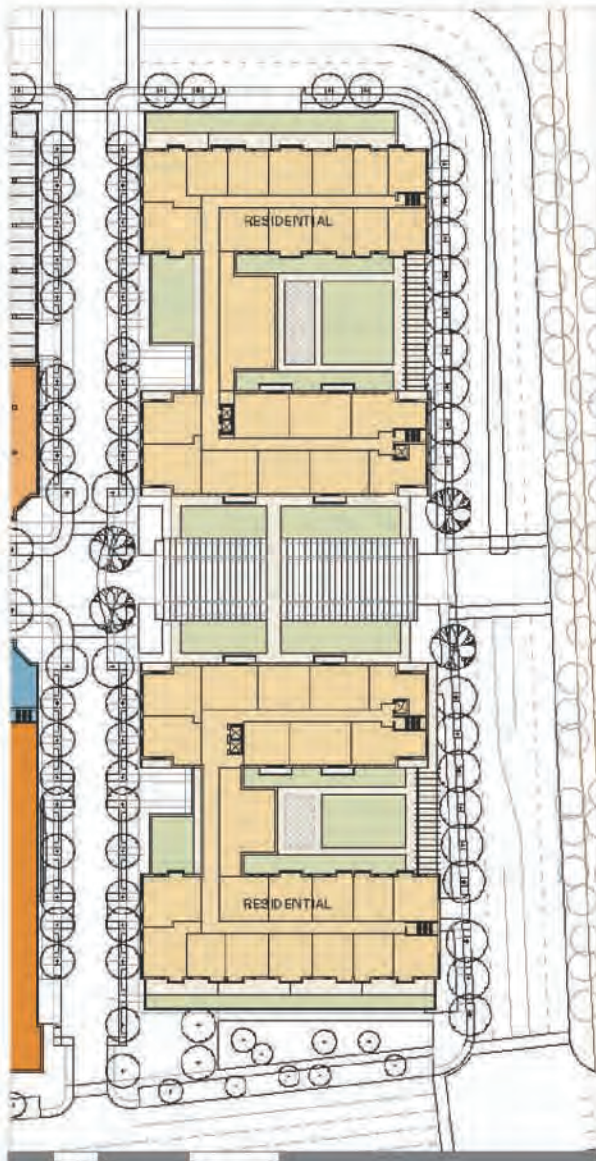
Lower Level Plan



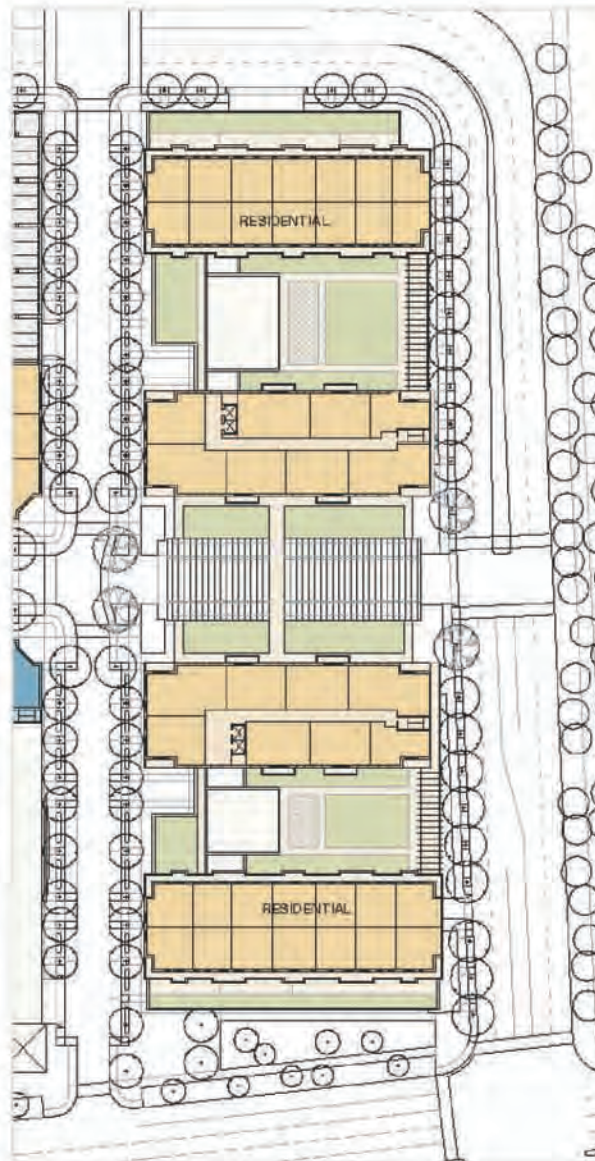
Ground Floor Plan



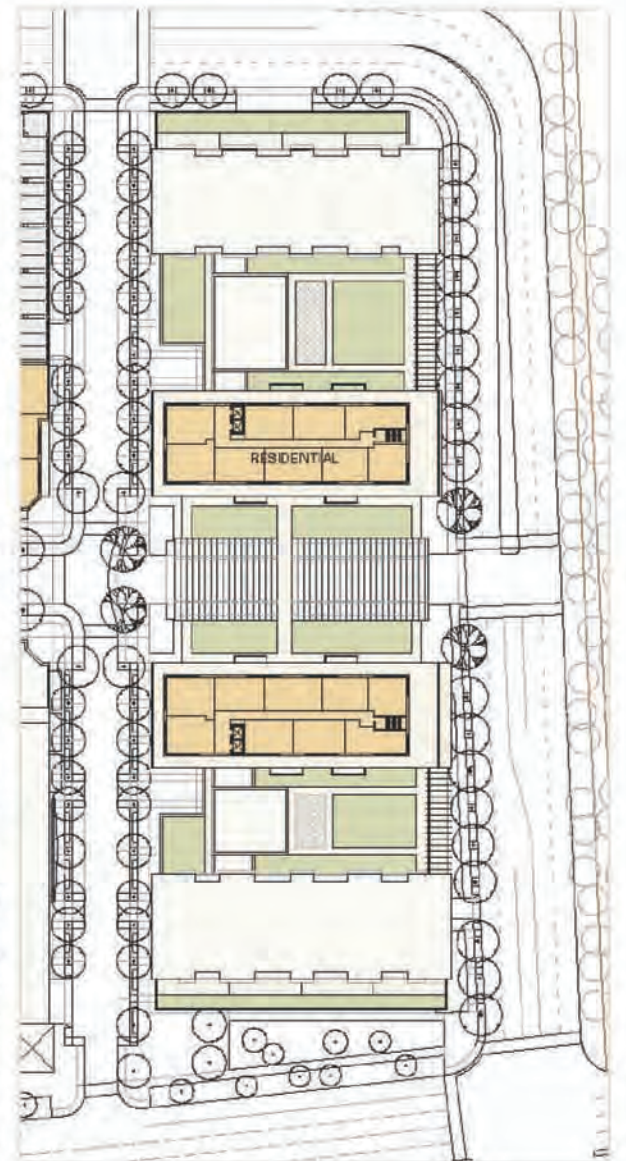
+10' Mezzanine Plan



+20' Plan/+30' Plan



+40' Plan/+50' Plan



+60' Plan/+70' Plan

Program Summary				
	AREA (NET SF)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	44,215		126	229
RESIDENTIAL	179,209	150	270	272
TOTALS	228,424	150	405	571



Source: Sunset Development Company, April 30, 2007.

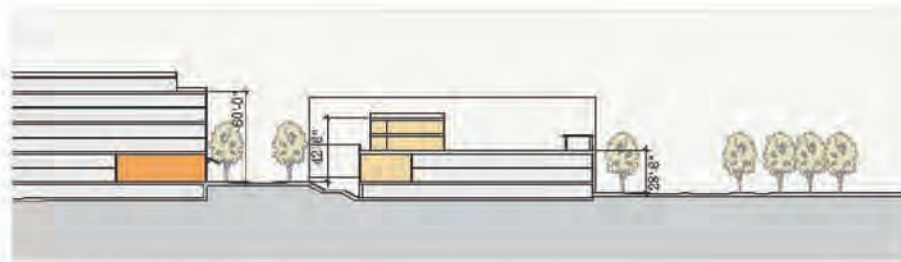


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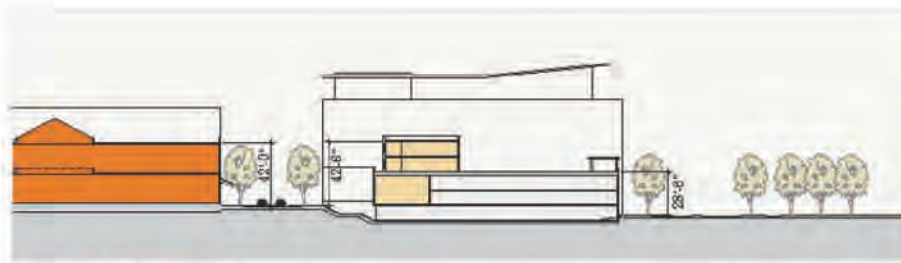
24910007 • 05/2007 | 3-7f_block_planF-G_sheet1.cdr

Exhibit 3-7f
Block Plan F-G Sheet 1

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Section A-A Building heights are measured from proposed finished grade.



Section B-B Building heights are measured from proposed finished grade.



Section C-C Building heights are measured from proposed finished grade.

Program Summary				
	AREA (NET SQ)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	44,815		195	200
RESIDENTIAL	179,209	150	270	272
TOTALS	224,024	150	465	472



Source: Sunset Development Company, April 30, 2007.

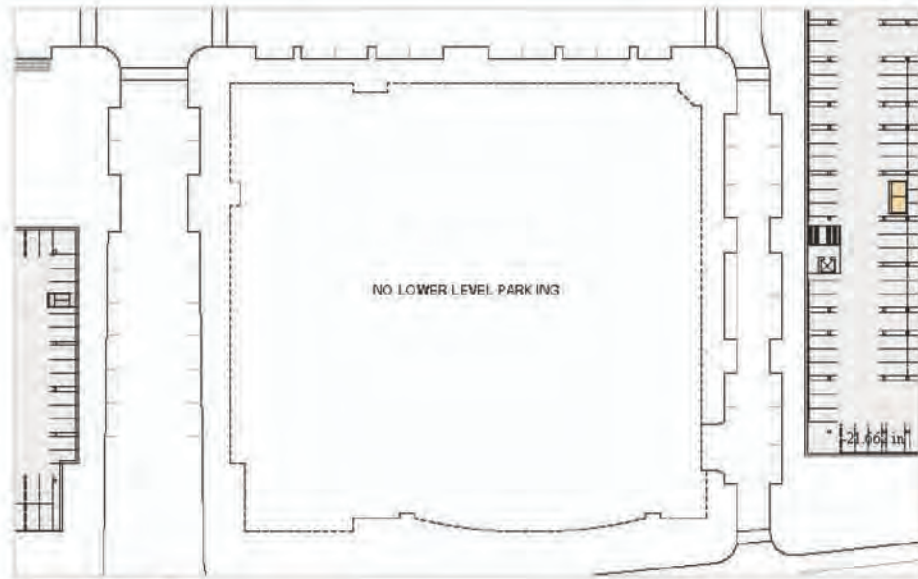


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24910007 • 05/2007 | 3-7g_block_planF-G_sheet2.cdr

Exhibit 3-7g
Block Plan F-G Sheet 2

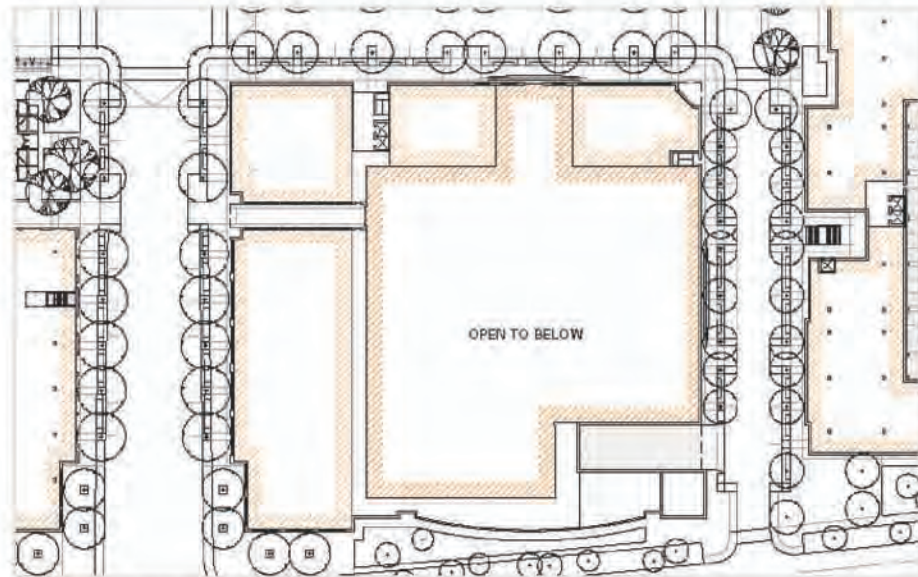
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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



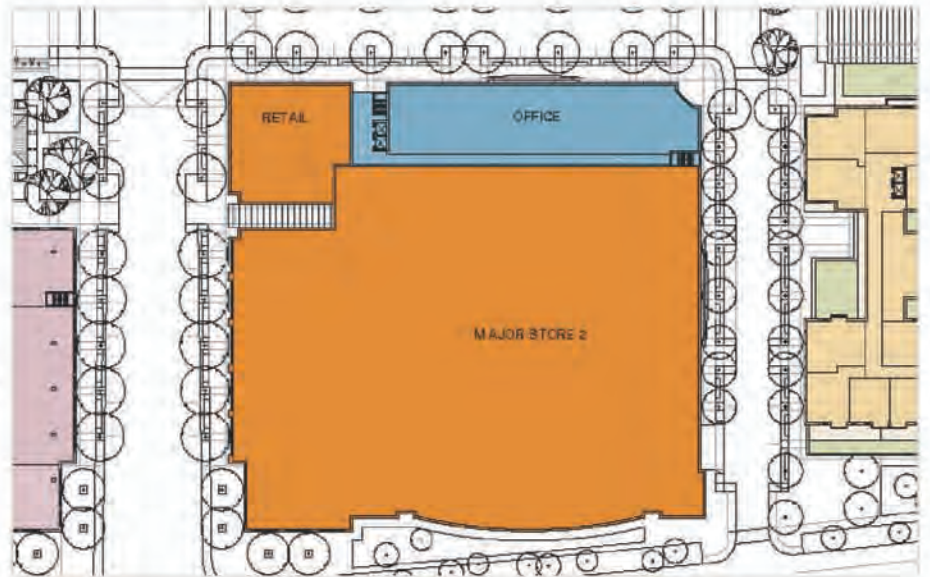
Lower Level Plan



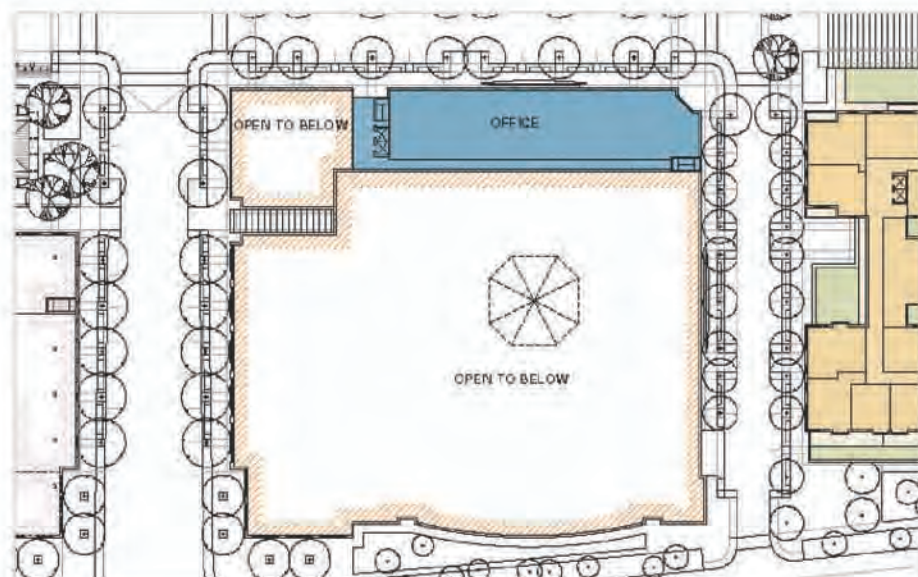
Ground Floor Plan



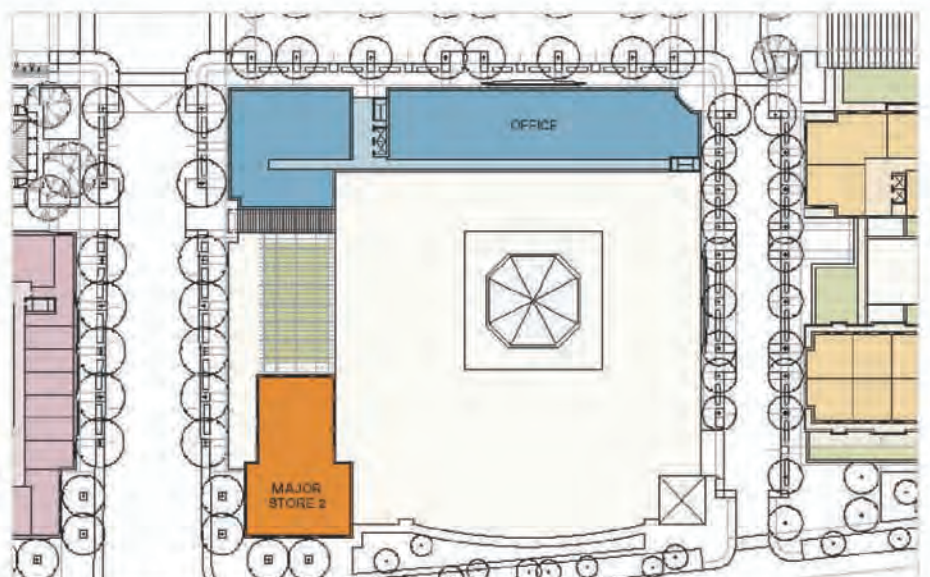
+10' Mezzanine Plan



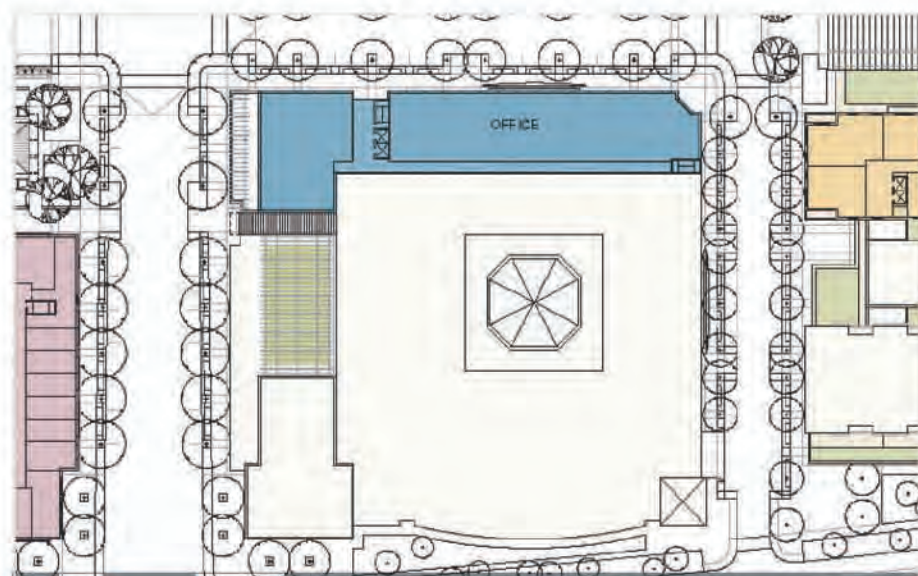
+20' Plan



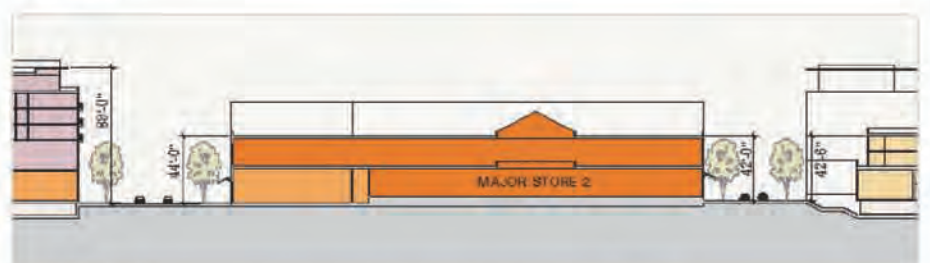
+30' Plan



+40' Plan

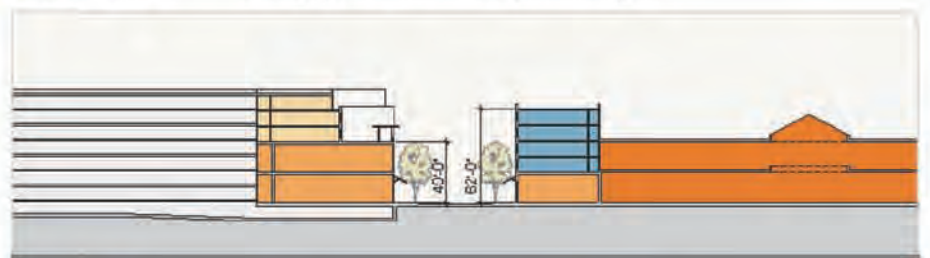


+50' Plan



Section A-A

Building heights are measured from proposed finished grade.



Section B-B

Building heights are measured from proposed finished grade.

Program Summary

	AREA (NET SF)	DWELLING UNITS	PARKING REQUIRED	PARKING PROVIDED
RETAIL	152,856	0	785	0
OFFICE	50,142	0	0	0
TOTALS	202,998	0	785	0

Key Plan



Source: Sunset Development Company, April 30, 2007.



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24910007 • 05/2007 | 3-7h_block_planH.cdr

Exhibit 3-7h
Block Plan H

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Although no tenants have been formally identified at the time of this writing, end users for the anchor store spaces are expected to include upscale department stores.

Residential

High-density residential uses would total 550,669 square feet and up to 487 dwelling units and would be spread among five of the seven blocks of Plaza District. Units types would include for-sale condominiums, loft condominiums, branded condominiums associated with and managed by the hotel, and rental units. Unit sizes would vary from 750-square-foot, lower-floor, “Main Street”-oriented units to 2,000-square-foot, upper-floor penthouses. In accordance with the City’s Housing Element objective of setting aside 25 percent of new dwelling units as below market rate housing, a percentage of the dwelling units would be set aside as deed-restricted workforce housing available for households with qualifying incomes. If the project would not meet the 25 percent objective, then in-lieu-of fees would be provided to the City to develop affordable housing elsewhere in San Ramon. Table 3-6 provides a summary of the residential square footage and unit count for the five Plaza District blocks with residential uses.

Table 3-6: Plaza District Residential Uses Summary

Block	Square Footage	Dwelling Units
A	90,739	82
B	103,550	96
D	90,489	83
E	86,652	77
F-G	179,209	150
Total	550,669	487

Source: Sunset Development Company, 2007.

Office

Office uses totaling 50,142 square feet would be located on the third, fourth, and fifth stories of Block H. These uses could be converted to retail, creating the potential for office/retail flex.

Hotel

A six-story, 169-room, hotel totaling 139,867 square feet would be located on Block C. The hotel would be the tallest structure in the Plaza District, with its architectural features reaching an elevation of approximately 91 feet above finished grade. The hotel would feature conference/meeting room and ballroom facilities.

Parking

Off-street parking would be provided in garages within six of the seven blocks in the Plaza District. Table 3-7 summarizes parking by block, projected demand, spaces provided, and assignment. Exhibit 3-7 provides a depiction of the Plaza District parking garages. On-street parking would be available

on Center Street, West Street, and East Street at all times, and on Camino Ramon during non-peak hours. In addition, the existing Bishop Ranch 3 parking structure located on the north side of Bishop Drive would be available for use on the weekends and during non-office hours of weekdays.

Table 3-7: Plaza District Parking Summary

Block	Projected Demand	Spaces Provided	Parking Levels	Assignment
A	450	1,471	8	149 residential spaces; 1,322 retail spaces
B	657	171	1	Residential only
C	289	160	1	Hotel only
D	961	542	5	165 residential spaces; 377 retail spaces
E	434	1,069	8	139 residential spaces; 977 retail spaces
F-G	465	571	4	272 residential spaces; 299 retail spaces
H	785	—	—	—
Total	4,043	4,124		

Source: Sunset Development Company, 2007.

Architectural Design

The architectural design of the Plaza District structures would incorporate contemporary design elements that balance scale, adjacency, and use mix to create a visually appealing destination. The Plaza District design emphasizes four themes:

- Building exteriors that use distinctive, substantial, and forward-thinking materials to maximize a clean, contemporary, yet sustainable architecture.
- Maximize the use of glass to emphasize a sense of clarity and transparency, incorporate views of the surrounding hills into building design, and increase natural day lighting of interior spaces.
- Bring the dynamic movement of water into the design of important public spaces to activate the site as well as engage and attract pedestrians, creating settings for public gatherings.
- Promote a tranquil environment with stately landscaped streets and sidewalks; shade active sidewalks with dappled light of closely spaced street trees paired with varied planting.

All Plaza District structures would be multi-story structures, ranging from approximately 40 feet to approximately 91 feet above grade. The City of San Ramon General Plan explicitly exempts the City Center project from any building height limits.

The building sections of the Plaza District are shown in Exhibits 3-8a and 3-8b. The conceptual landscaping plan for the Plaza District is shown in Exhibit 3-9.

Bishop Ranch 1A Office Complex

A total of 681,769 square feet of Class A office space would be developed among three buildings on Parcel 1A. Known as Bishop Ranch 1A, the three buildings would be identical in footprint, size, and design, oriented around a central circular fountain. Access to Bishop Ranch 1A would be taken from the existing Bishop Ranch 1 entrance road. Each building would have a footprint of 33,027 square feet and would be a maximum of seven stories. Exhibit 3-10 provides a site plan of Bishop Ranch 1A and the adjacent City Hall and Transit Center.

Note that the existing entitlement on Parcel 1A for a 328,220-square-foot office complex would be superseded as part of the approvals for Bishop Ranch 1A and, therefore, would be negated.

Architectural Design and Landscaping

The architectural design of the office buildings would employ a curved façade and prominently feature the use of white building colors and glass, similar to the appearance of the nearby Bishop Ranch 1 office structures. The maximum height of the office buildings would be approximately 110 feet above grade. Note that the City of San Ramon General Plan explicitly exempts the City Center project from any building height limits.

The architectural design of Bishop Ranch 1A is shown in Exhibit 3-11. Landscaping would be provided throughout the office complex and is conceptually shown in Exhibit 3-12.

Parking

The development of the Bishop Ranch 1A office structures would necessitate the construction of new surface parking areas and multi-level structures for the use of Bishop Ranch 1A and Bishop Ranch 1. Three multi-level parking garages would ultimately be built on existing surface parking lots serving Bishop Ranch 1. Bishop Ranch 1A would be assigned 271 surface spaces and a five-level garage with 2,119 spaces, for a total of 2,390 spaces. A 4,300-square-foot café would be included in the Bishop Ranch 1A parking garage. Bishop Ranch 1 would be assigned 1,524 surface spaces and a five-level garage with 1,300 spaces, for a total of 2,824 spaces. Both garages would be located on the east side of the existing Bishop Ranch office structures, have a similar design, and be approximately 42 feet above grade. Bishop Ranch 1 and Bishop Ranch 1A would share an existing 240-space surface lot on the northwest side of Bishop Ranch 1 that would function as a reserve lot. Ultimately, this parking lot would be replaced with a five-level garage with 539 spaces that would be shared by both office complexes.

City Hall and Transit Center

A 110,490-square-foot City Hall and Transit Center would be developed on Parcel 1B. Each use is described below. The City Hall and Transit Center site plan is shown in Exhibit 3-13.

City Hall

The City Hall would feature a four-story City office building with an attached dome-shaped Council Chamber. A cast sculpting of the City symbol—an aloft crow with extended wings—would crown the top of the dome housing the Council Chamber. A tiered water fountain would also be incorporated into the exterior design of the Council Chamber. City Hall would contain space for City offices, meeting rooms, a Police Department headquarters, and a library. The new City Hall space would replace the existing City Hall and Police Department located at 2222 Camino Ramon and the existing library located at 100 Montgomery Street. The Police Department headquarters and library are discussed below. A public plaza would be located in front of the entrance to City Hall, which would face the Bishop Ranch 1 entrance road. The maximum height of City Hall would be approximately 70 feet above grade. The architectural design of City Hall is shown in Exhibit 3-14. Landscaping would be provided throughout the City Hall complex and is conceptually shown in Exhibit 3-15.

Police Department

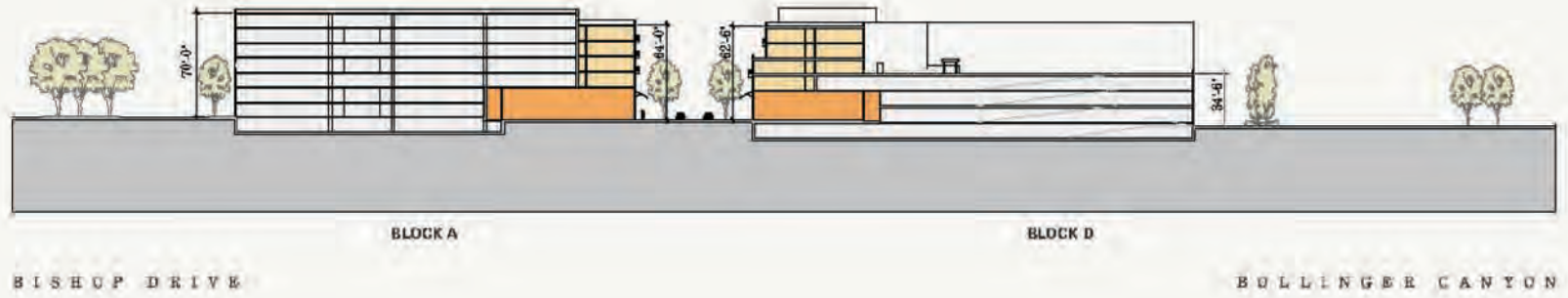
The Police Department headquarters space would be sized to accommodate 100 to 125 full-time equivalent employees (sworn and non-sworn civilian positions), which is the anticipated size of the Police Department by 2015. The Police Department headquarters would include (1) a lobby and front counter, (2) a training/briefing room, (3) administrative offices that would house a Police Records Bureau and the Investigation Division, (4) male and female locker rooms with restroom and shower facilities, (5) a secure police armory, (6) a secure evidence storage area, (7) a separate entrance for Police Department personnel, (8) a discreet entrance adjacent to the parking area that would allow officers to bring arrested persons into the building for processing, and (9) secure parking for police vehicles. The facility may also include an Emergency Operations Center.

Library

The library would be sized to accommodate approximately 200,000 books and audiovisual materials. The library would contain public computers located in a Technology Lab, a Homework Center, reader seats, group study rooms, a community conference room, a community meeting/program room, and a storytelling and class visit space.

Transit Center

The Transit Center would be incorporated into the ground floor of the two-level, 414-space parking garage that would be located on the south side of the City Hall. The Transit Center would provide four bus stalls and a waiting area for passengers. The ground floor of the parking structure would also include Police Department vehicle parking and reserved parking for City officials. Public parking would be provided on the second level. Eight surface spaces would be provided as well, for a total of 422 parking spaces. The maximum height of the Transit Center would be approximately 28 feet above grade.



Section A-A



Section B-B



Section C-C



Section D-D

Development Summary					
	RETAIL (NET SF)	HOTEL (NET SF)	OFFICE (NET SF)	RESIDENTIAL (NET SF)	DWELLING UNITS
PARCEL 2 (BLOCK A, B, C, D)					
A	65,160	0	0	90,769	82
B	79,525	0	0	103,550	96
169days C	25,961	139,867	0	0	0
D	193,385	0	0	90,489	83
Subtotal 2	364,031	139,867	0	284,808	260
PARCEL 3A (BLOCK E, F, G, H)					
E	87,440	0	0	86,652	75
F	28,620	0	0	89,152	75
G	15,595	0	0	90,057	75
H	15,595	0	50,142	0	0
Subtotal 3A	271,011	0	50,142	365,861	227
Total (2 and 3A)	635,042	139,867	50,142	550,669	487
Total Program Net Area	1,375,720 SF				

Notes

1. For Parking see sheet MP.10
2. Average Net Dwelling Unit size 1095 nsf
3. For Block Plans see sheets MP.17 through MP.24
4. Building heights are measured from proposed finished grade.



Source: Sunset Development Company, April 30, 2007.

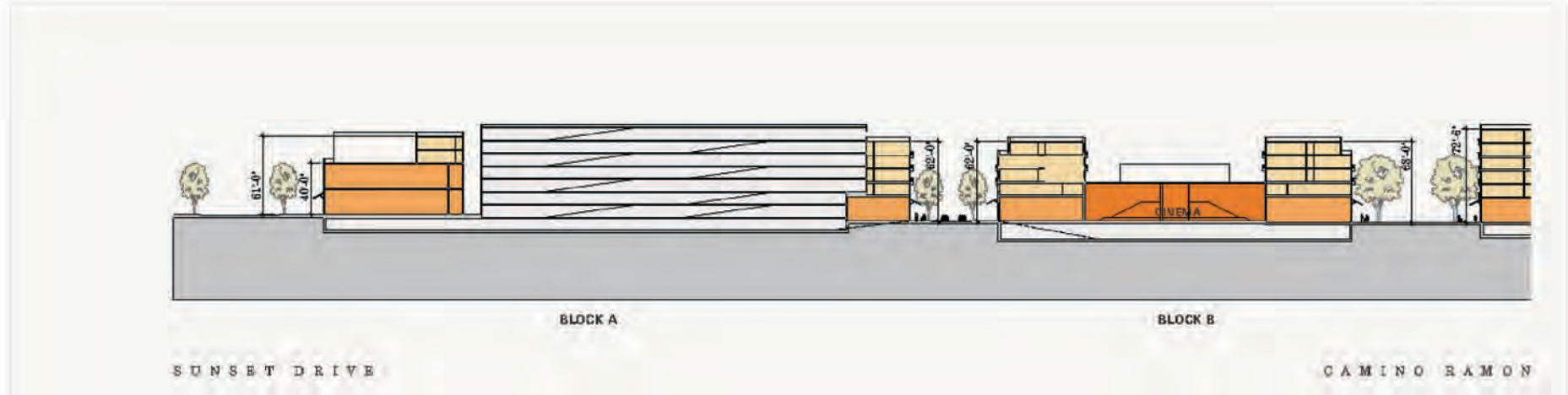


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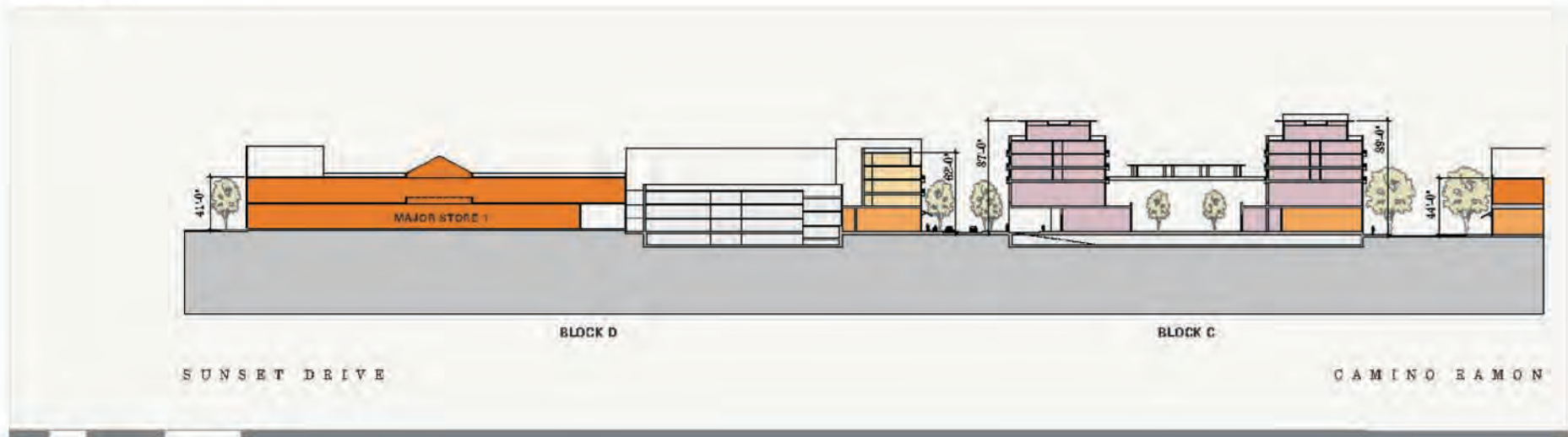
24910007 • 06/2007 | 3-8a_plaza_district_sections_north_south.cdr

Exhibit 3-8a
Plaza District Sections - North-South

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



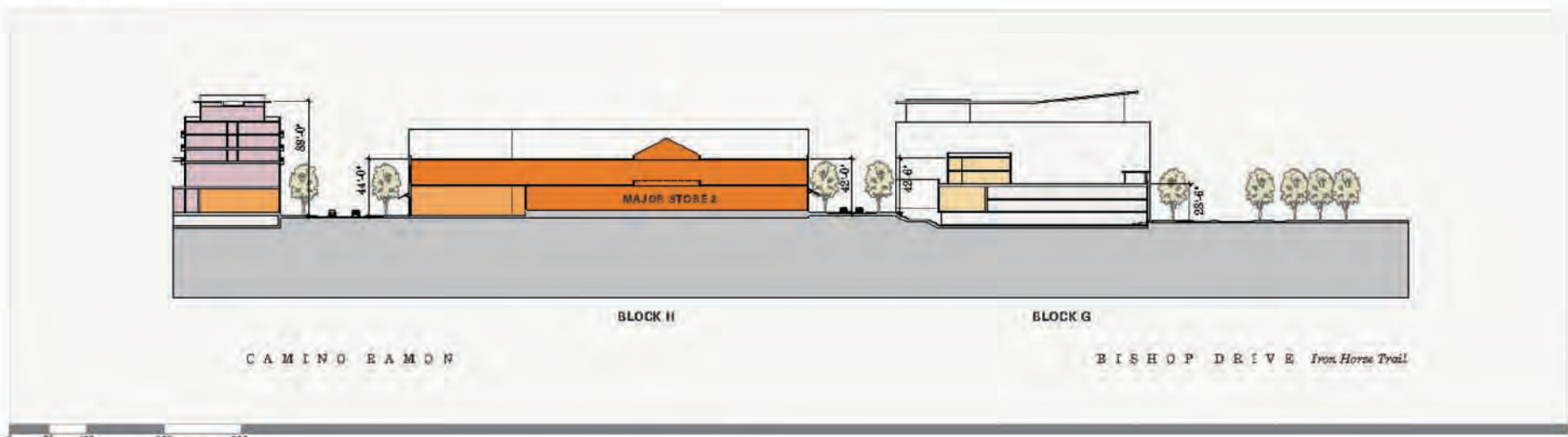
Section E-E



Section F-F



Section G-G



Section H-H

Development Summary					
	RETAIL (NET SF)	HOTEL (NET SF)	OFFICE (NET SF)	RESIDENTIAL (NET SF)	DWELLING UNITS
PARCEL 2 (BLOCK A, B, C, D)					
A	65,160	0	0	90,769	82
E	79,825	0	0	103,550	96
169 days C	25,061	139,567	0	0	0
D	139,285	0	0	90,489	83
Subtotal 2	364,031	139,567	0	284,808	260
PARCEL 3A (BLOCK E, F, G, H)					
E	87,440	0	0	86,652	75
F	25,620	0	0	89,152	75
G	15,595	0	0	90,057	75
H	15,595	0	50,142	0	0
Subtotal 3A	271,011	0	50,142	265,861	227
Total (2 and 3A)	635,042	139,567	50,142	550,669	488
Total Program Net Area: 1,375,720 SF					

Notes

1. For Parking see sheet MP.10
2. Average Net Dwelling Unit size 1095 sqf
3. For Block Plans see sheets MP.17 through MP.24
4. Building heights are measured from proposed finished grade.



Source: Sunset Development Company, April 30, 2007.

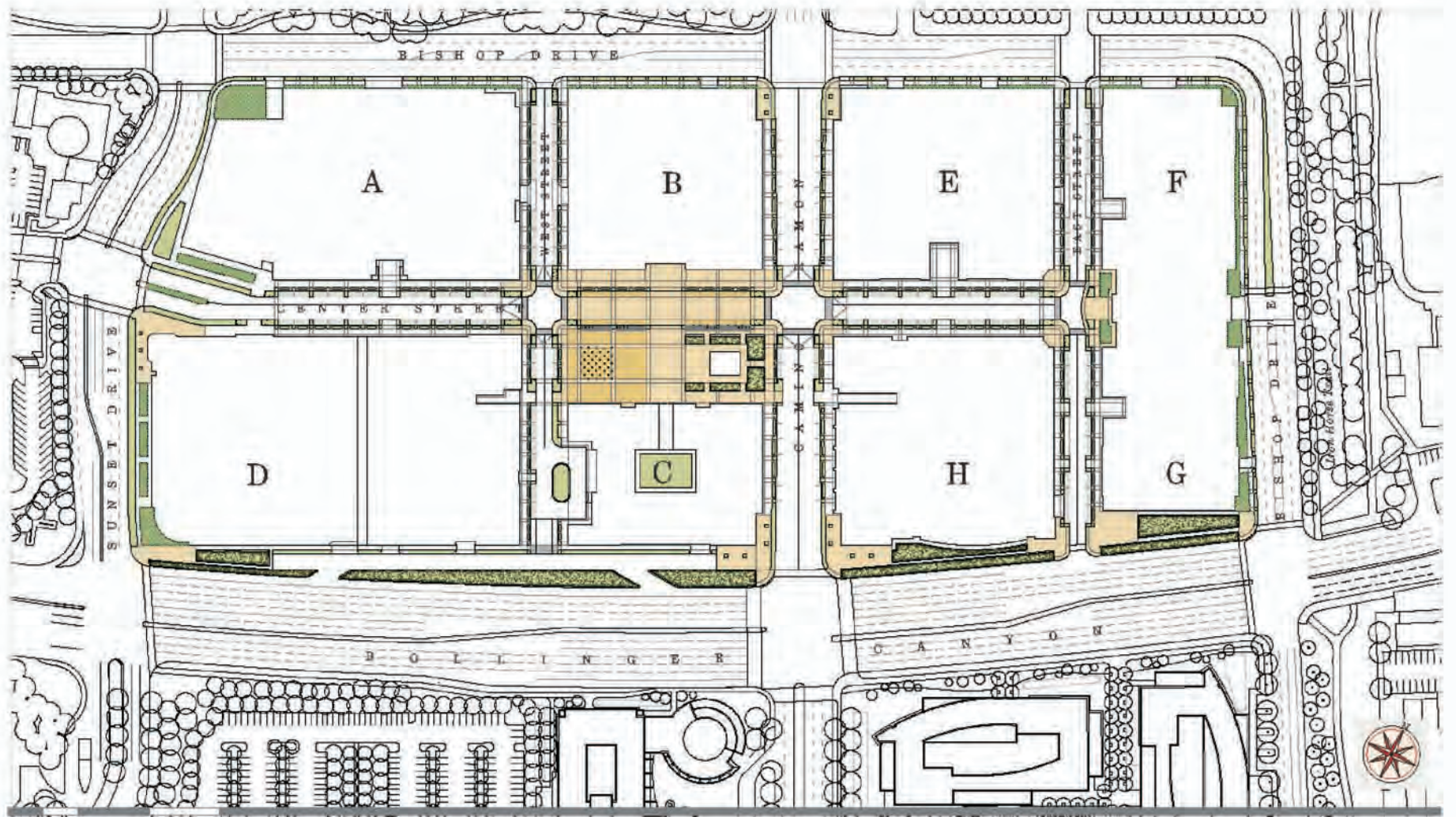


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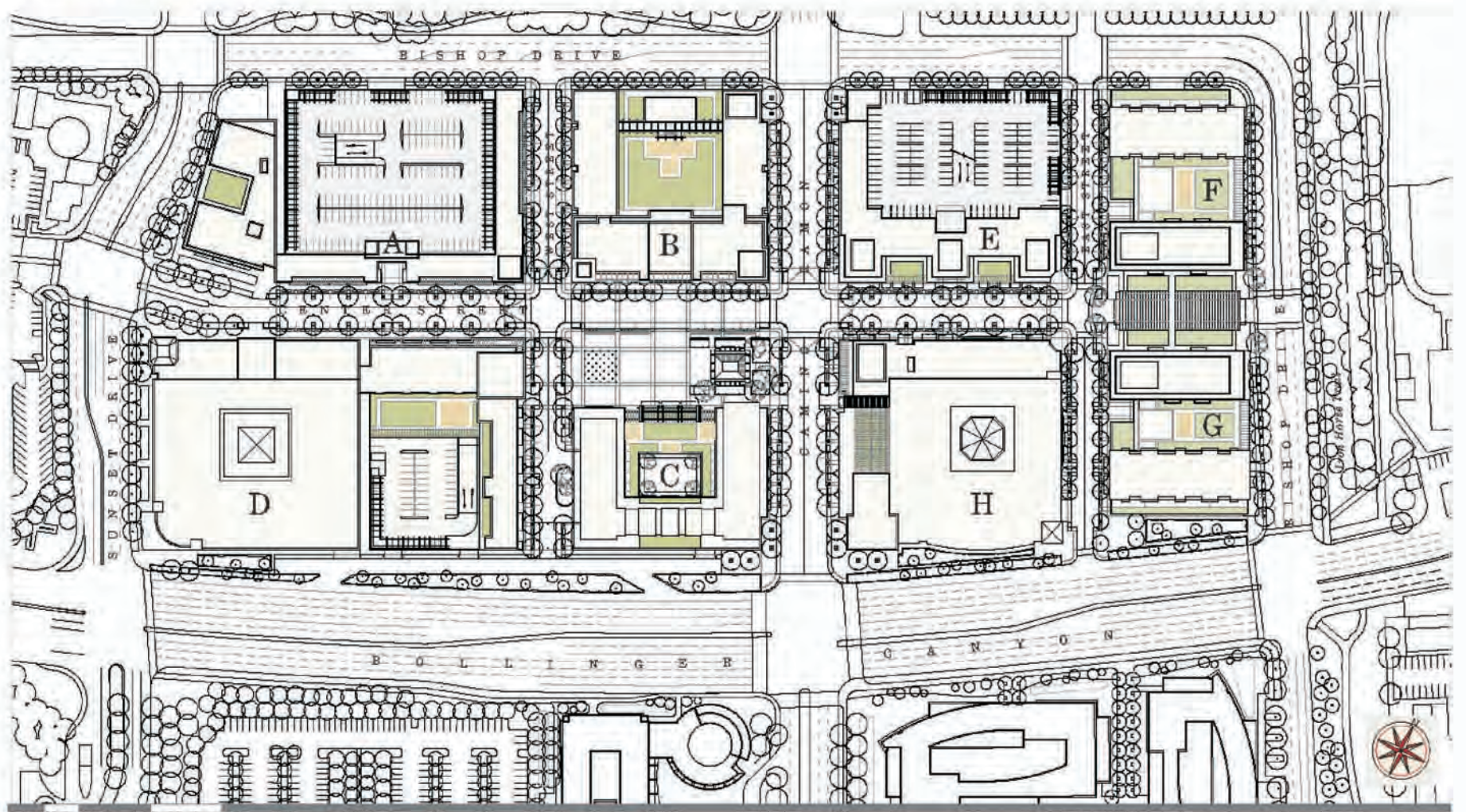
24910007 • 06/2007 | 3-8b_plaza_district_sections_east_west.cdr

Exhibit 3-8b
Plaza District Sections - East-West

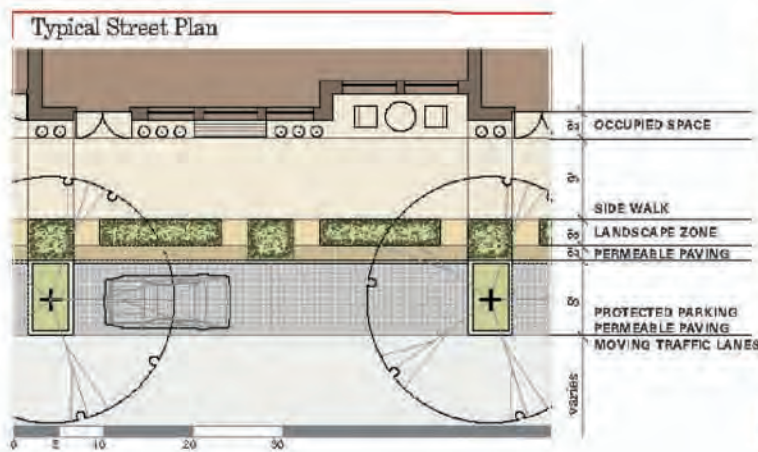
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Ground Floor Landscape Plan



Roof Deck Landscape Plan



Landscape Area			
Total Site Area - 25.86 acres			
	SF	ACRE	PERCENTAGE OF TOTAL SITE AREA
Landscape Area - Ground	177,674	4.05	15.8%
Greenery	90,118	2.07	8.0%
Permeable Paving	18,397	0.42	1.6%
Other Special Paving	69,159	1.59	6.1%
Landscape Area - Roof	62,040	1.42	5.5%
Greenery	55,818	1.28	5.0%
Special Paving	6,222	0.14	0.6%
Total Landscape Area	239,714	5.50	21.3%

Impervious Area		
	SF	ACRE
Landscape Area	147,200	3.38
Permeable Paving	22,578	0.52
Permeable Parking	18,512	0.42
Total Pervious Area	188,290	4.32
Total Impervious Area	938,172	21.54

Bioswales Area			
	SF	ACRE	PERCENTAGE OF IMPERVIOUS AREA
Bioswales	19,065	0.44	2.0%



Source: Sunset Development Company, April 30, 2007.

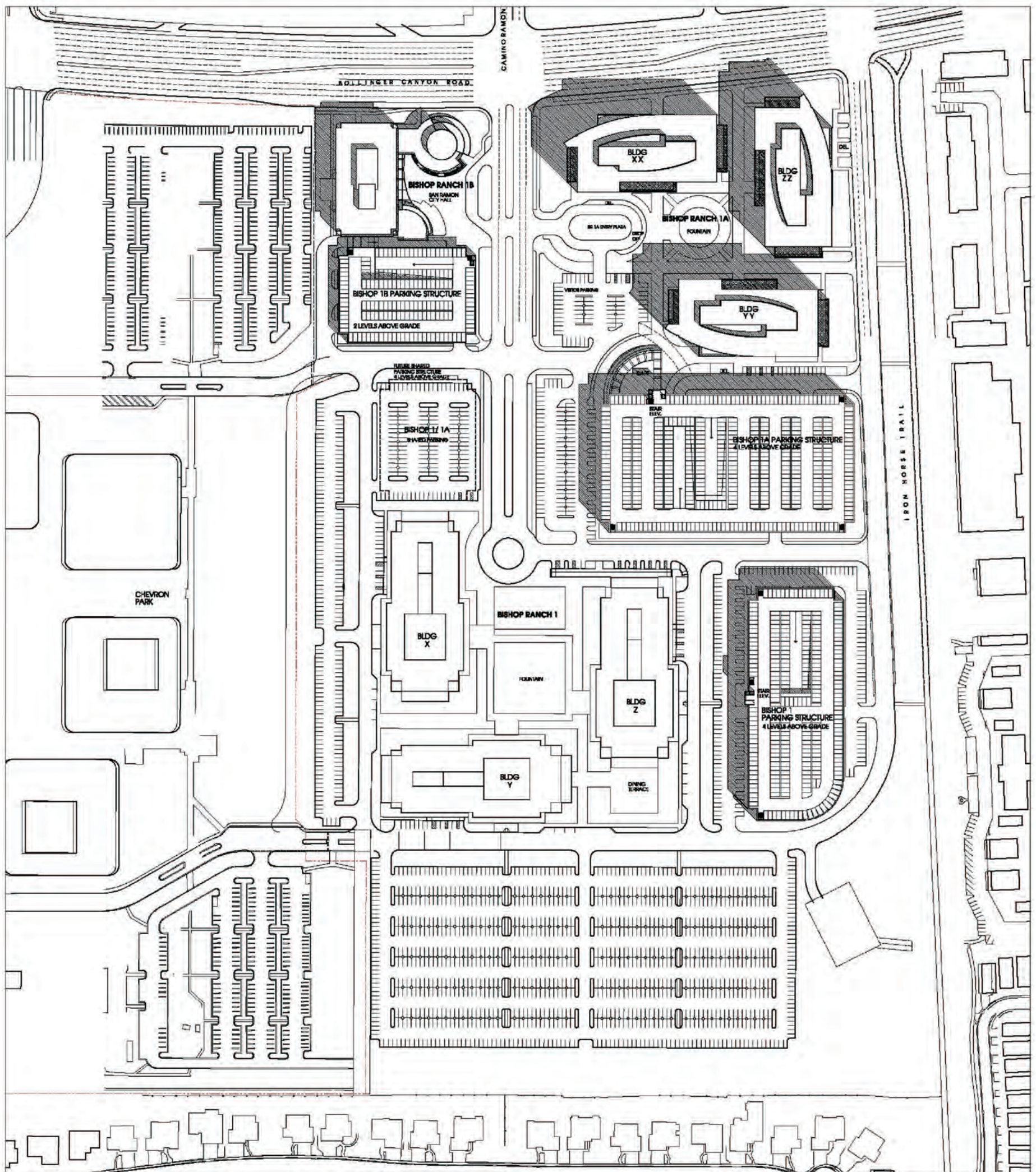


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Exhibit 3-9 Landscape Concept Plan

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BISHOP RANCH I + IA + 1B STATISTICS

Site Statistics	BR1	BR1A	BR1 + BR1A	BR1B (CITY HALL)
Lot Size (Acres)-Legal Description	26.75	21.42	48.17	3.57
Lot Size (Sq. Ft.)-Legal Description	1,165,365	932,781	2,098,106	165,687
Landscaped Area		582,420		168,456
Lot Size-curb to curb (Sq. Ft.)				38,298 (22.7%)
Permeable Landscaping (Sq. Ft.)				
Office Building Statistics				
Number of Buildings	3	3	6	1
Stories per Building	5	7		4
Footprint per Bldg (Sq. Ft.)	42,569	33,027		38,000
Total Footprint (Sq. Ft.)	127,707	99,081		
FAG per Bldg (Sq. Ft.)	242,697	276,715		
Total FAG (Sq. Ft.)	728,091	830,146	1,558,236	127,265
Total FAN (Sq. Ft.)	704,187	677,469	1,381,656	110,490
FAR (FAN/Site Area)	60.43%	72.63%	66.85%	70.97%
Case Statistics				
Total Grass Area (Sq. Ft.)		4,300		

LEGEND

FAG (FLOOR AREA GROSS PER CITY OF SAN RAMON)	FAN (FLOOR AREA NET PER CITY OF SAN RAMON)
THE TOTAL ENCLOSED AREA OF ALL FLOORS OF A BUILDING ENCLOSED BY EXTERIOR WALLS AND WHICH ARE LOCATED UNDER A FLOOR ABOVE, MEASURED TO THE INSIDE SURFACES OF EXTERIOR WALLS AND INCLUDING HALLS, STAIRWAYS AND ELEVATOR SHAFTS.	THE TOTAL ENCLOSED AREA OF ALL FLOORS OF A BUILDING MEASURED TO THE OUTSIDE FACE OF THE STRUCTURAL MEMBERS IN EXTERIOR WALLS, AND EXCLUDING HALLS, STAIRWAYS, ELEVATOR SHAFTS AT EACH FLOOR LEVEL, SERVICE AND MECHANICAL EQUIPMENT ROOMS, AND BASEMENT OR ATTIC AREAS HAVING A HEIGHT OF MORE THAN 7 FEET, ETC. (NA)

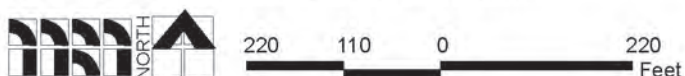
BISHOP RANCH I + IA + 1B STATISTICS

Parking Statistics	BR1	BR1A	BR1 + BR1A	BR1B (CITY HALL)
Parking Existing				
Existing cars (per previous entitlement)	2787			
Parking Required				
Required cars (per city @ 3.5/1,000 FAN)		2371		367
Parking Provided				
Parking Structures	1	1		1
Levels per Structure (inc. Grade)	5	5		3
Cars In Structures (inc. Grade)	1300	2119	3419	414
Cars at Grade	1624	271	1796	8
Total Cars without reserve	2924 (4.01/1000)	2390 (3.53/1000)	5214 (3.78/1000)	422 (3.82/1000)

Note: Parking Lot North of Building X is a shared lot between BR1 & BR1A (140 cars shared equally)

Reserve Parking	1
Shared Parking Structure	5
Levels including Grade	639 Net
Cars In Structure	
Total Cars With Reserve	5753 (4.16/1000)

Source: Sunset Development Company, April 30, 2007.

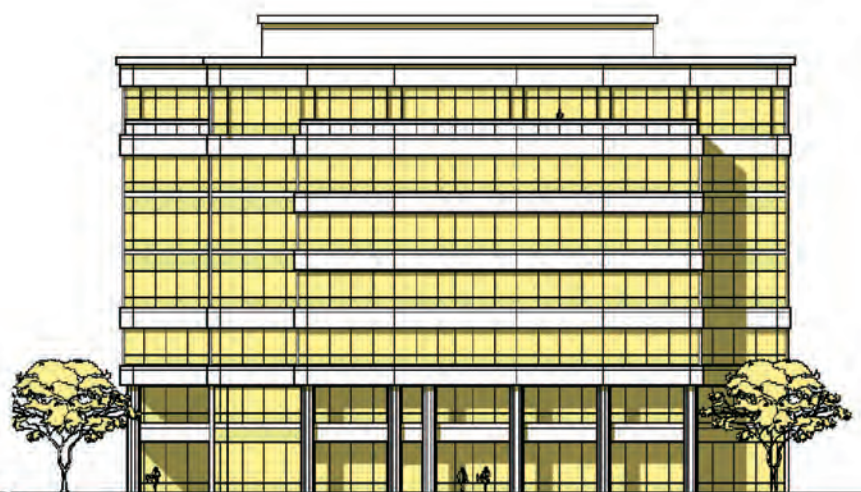
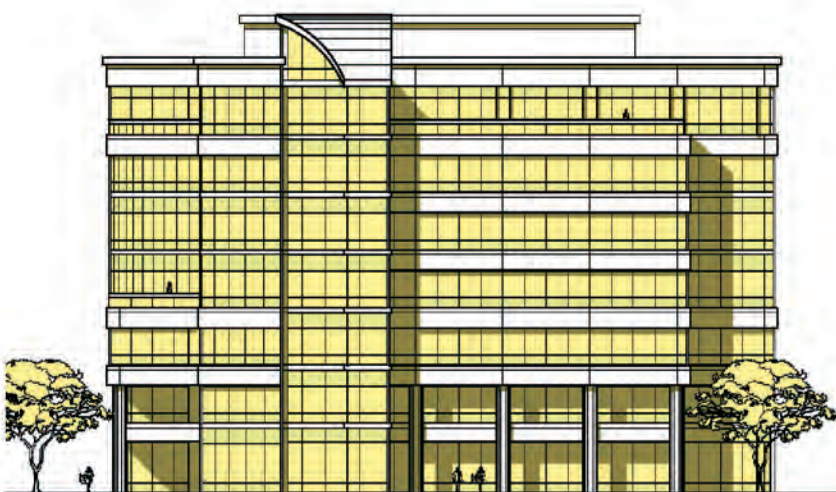
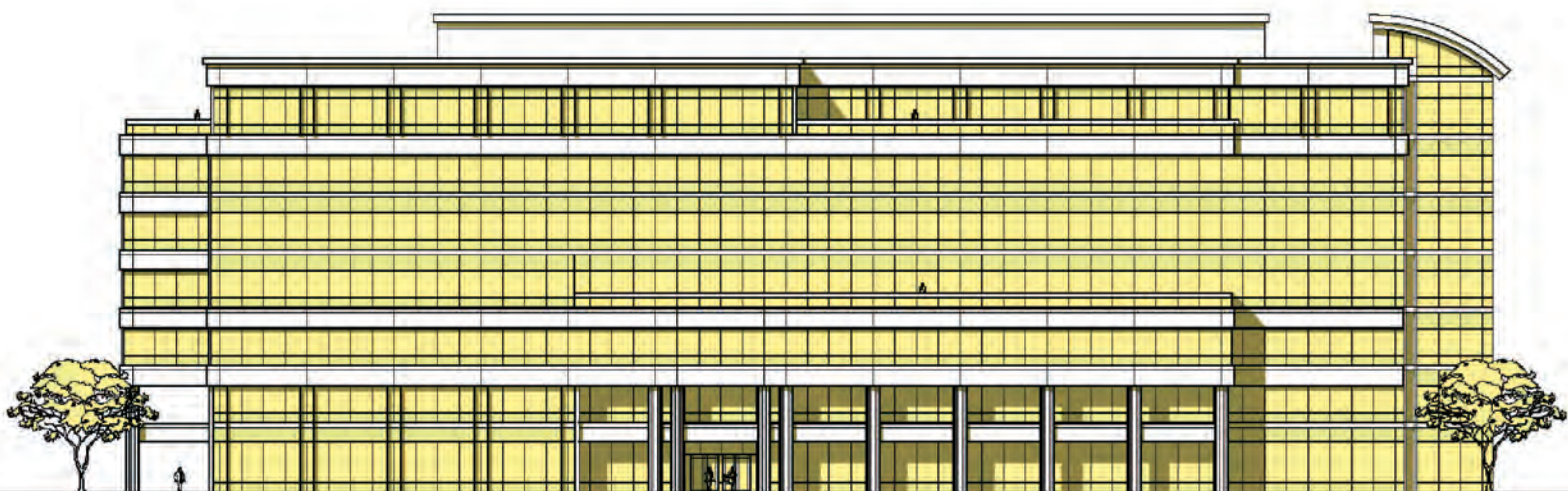
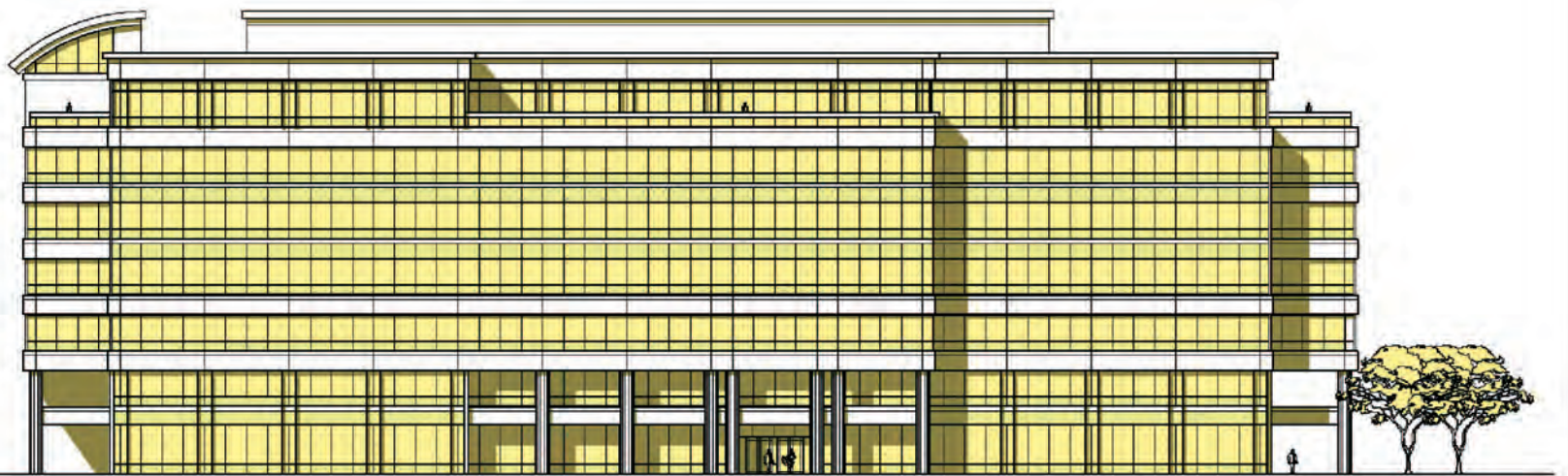
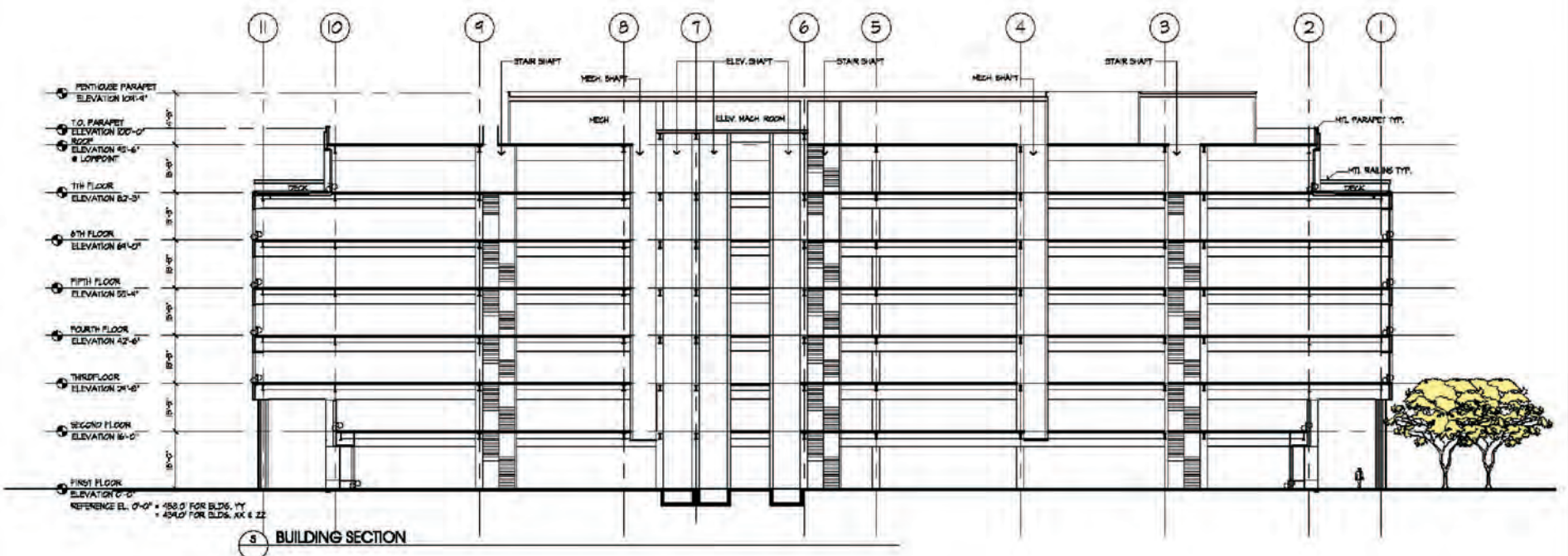


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**Exhibit 3-10
Bishop Ranch 1A, City Hall, and Transit Center Site Plan**

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Source: Sunset Development Company, April 30, 2007.

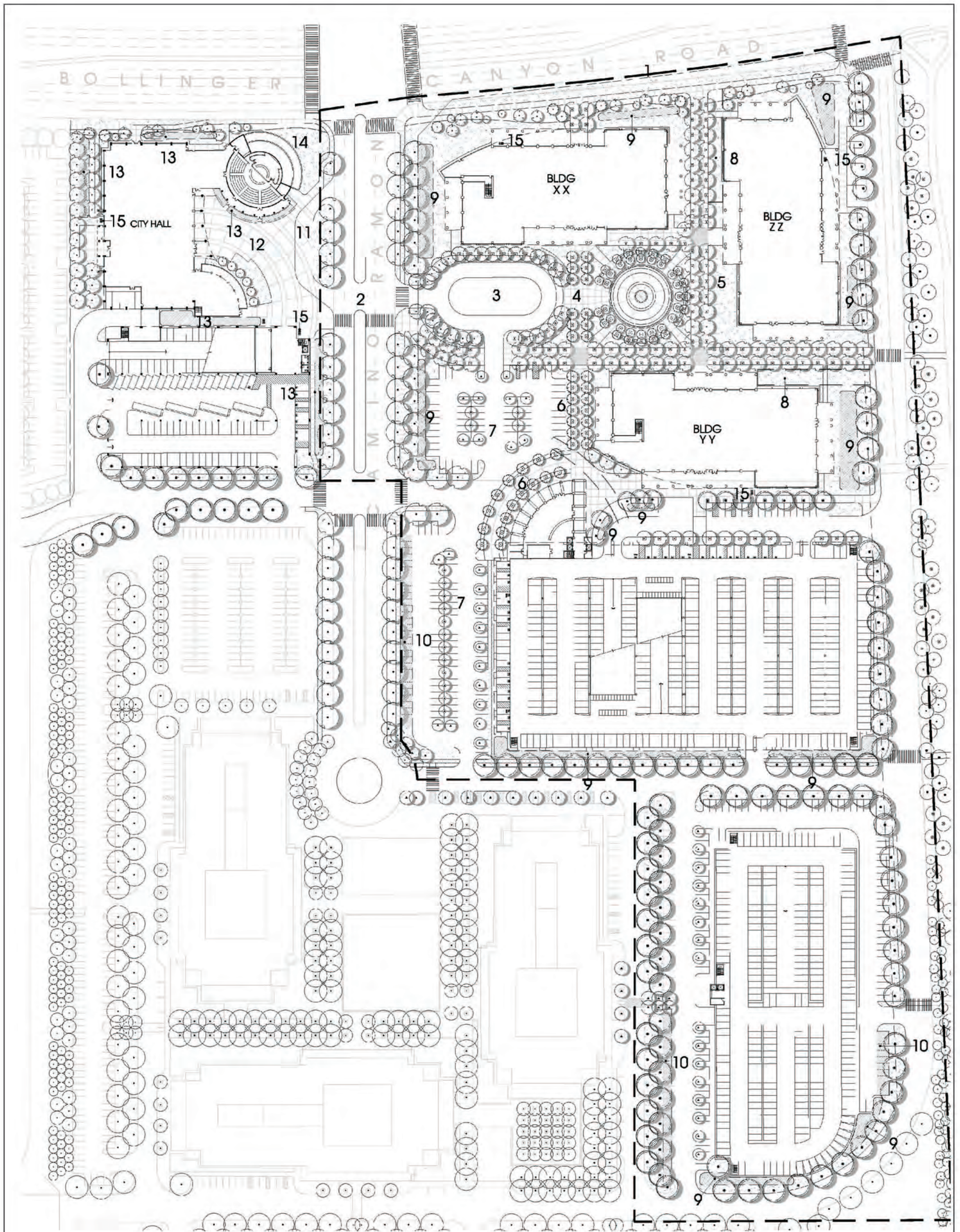


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24910007 • 06/2007 | 3-11_br_sections_elevations.cdr

Exhibit 3-11
 Bishop Ranch 1A Sections and Elevations

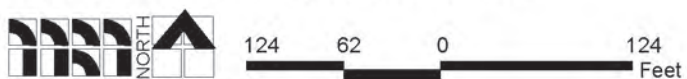
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CITY CENTER 1A NOTES:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. BOLLINGER CANYON ROAD - DECIDUOUS AND EVERGREEN FRAMEWORK - COLUMNAR OAKS, STONE PINES AND CRAPE MYRTLES 2. CAMINO RAMON ENTRANCE ALLEE - EXISTING LONDON PLANE TREES TO REMAIN 3. OFFICE COMMONS DROP-OFF PLAZA LINDEN TREE FRAMEWORK 4. OFFICE COMMONS CENTRAL COURTYARD - CIRCULAR FOUNTAIN FOCAL POINT RINGED WITH FLOWERING CRAPE MYRTLES 5. IRON HORSE TRAIL CONNECTION - LONDON PLANE TREE ALLEE 6. CAFE PLAZA AND WALK - FLOWERING CHERRY TREES 7. SHADED GUEST PARKING - HONEY LOCUST | <ol style="list-style-type: none"> 8. EMERGENCY VEHICLE FIRE LANE - 20' CLEARANCE 9. STORM WATER BMP - BIOSWALE 10. STORM WATER BMP - PERMEABLE PAVING 11. CITY HALL PLAZA VISITOR DROP-OFF 12. CITY HALL COURTYARD - INLAID GRANITE ARCHING BANDS ON GROUNDPLANE - FLOWERING CRAPE MYRTLES AND SHADED SEATING 13. STORM WATER BMP - BIOSWALE 14. CITY HALL FOUNTAIN 15. BIKE RACKS |
|---|---|

Source: Sunset Development Company, April 30, 2007.

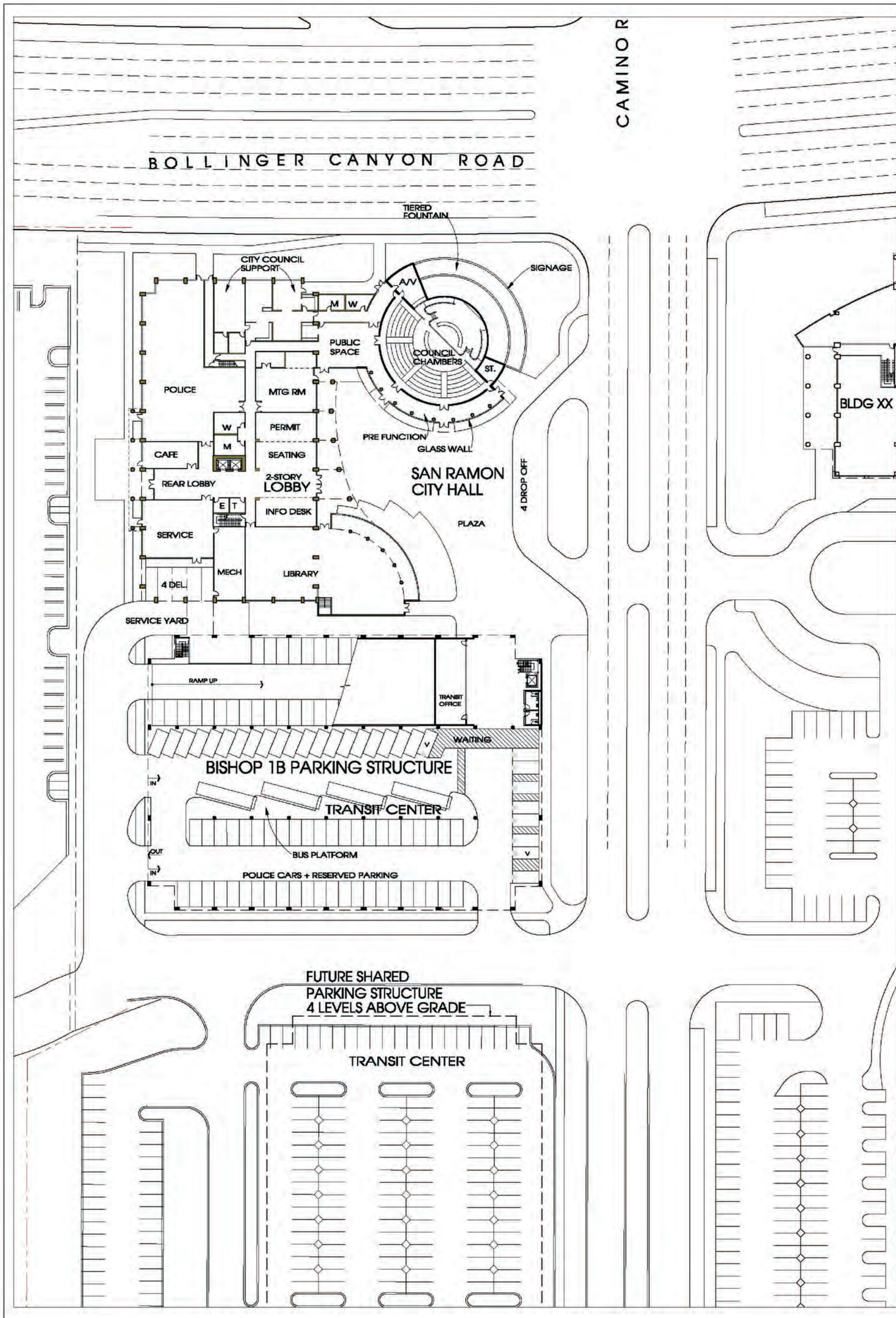


Michael Brandman Associates

24910007 • 06/2007 | 3-12_br_transit_center_landscaping.cdr

Exhibit 3-12
Bishop Ranch 1A, City Hall, and
Transit Center Landscaping Plan

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
 DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Source: Sunset Development Company, April 30, 2007.



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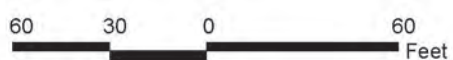
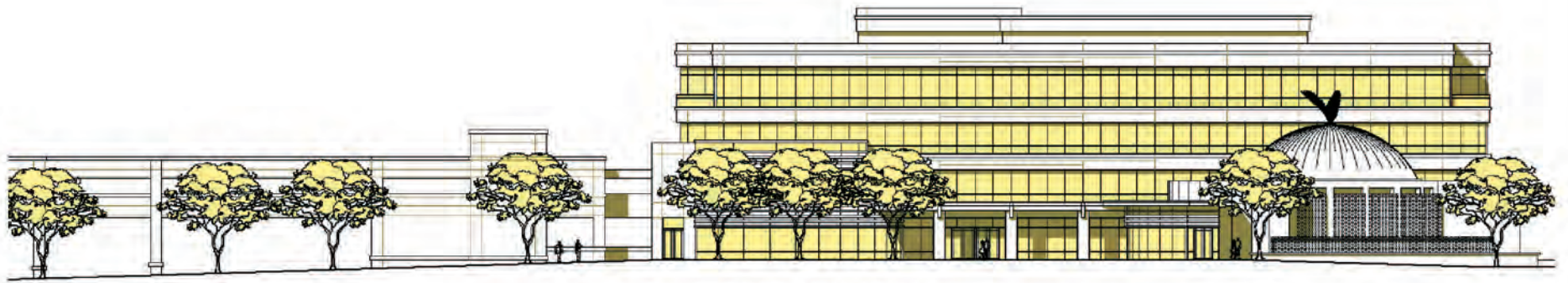
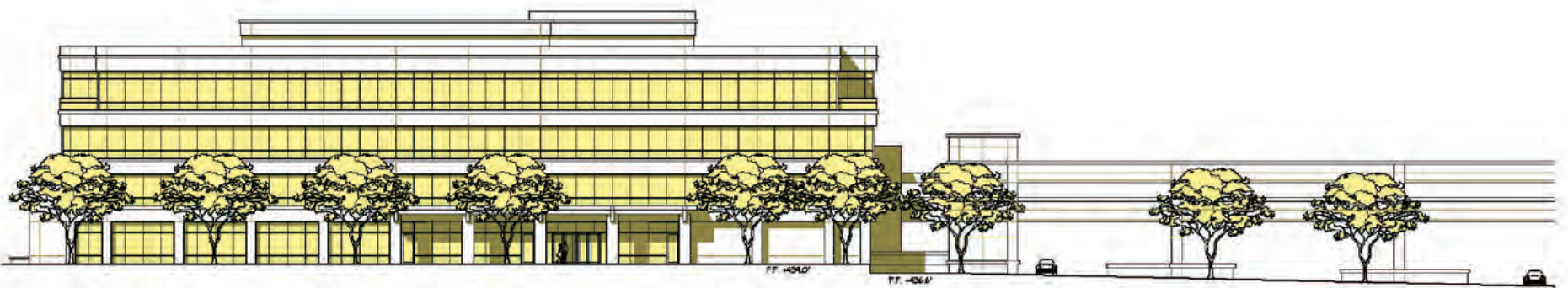


Exhibit 3-13
City Hall and Transit Center Site Plan

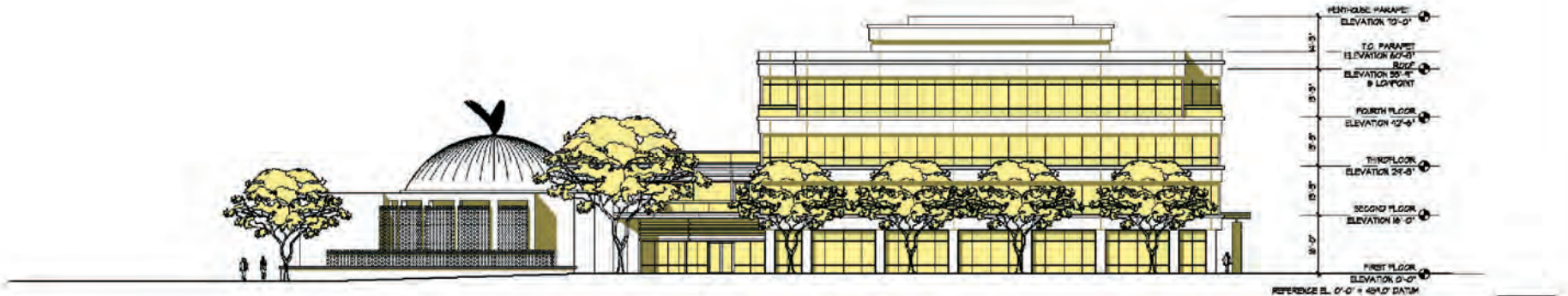
CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



1 EAST ELEVATION (FRONT)



2 WEST ELEVATION (REAR)



3 NORTH ELEVATION (BOLLINGER RD)

PENTHOUSE PARAPET	ELEVATION 75'-0"
T.O. PARAPET	ELEVATION 80'-0"
ROOF	ELEVATION 80'-0"
FOURTH FLOOR	ELEVATION 42'-0"
THIRDFLOOR	ELEVATION 24'-0"
SECOND FLOOR	ELEVATION 18'-0"
FIRST FLOOR	ELEVATION 0'-0"
REFERENCE EL. 0'-0" = 4242' DATUM	

Source: Sunset Development Company, April 30, 2007.

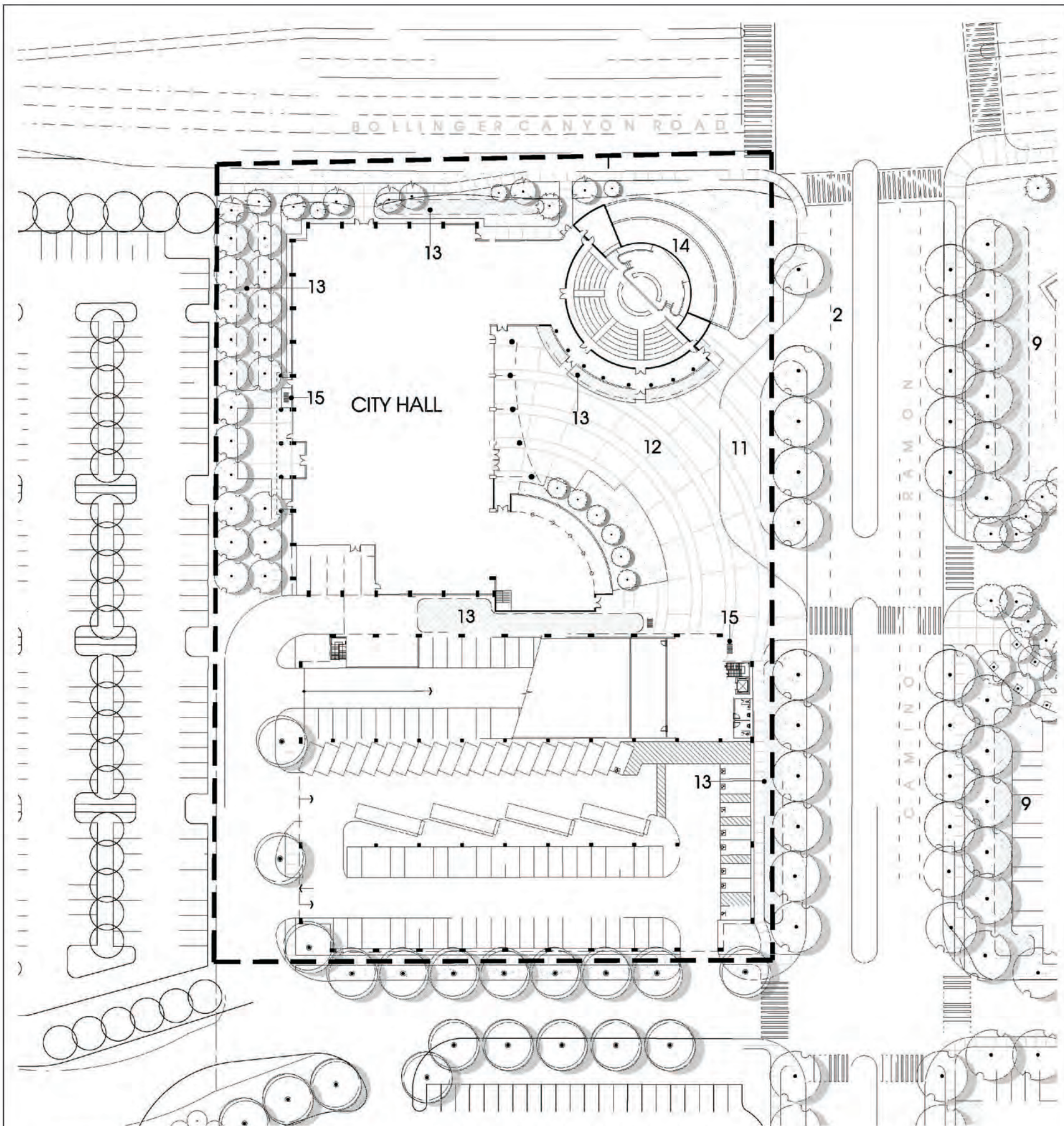


Michael Brandman Associates

24910007 • 06/2007 | 3-14_city_hall_transit_center_sections_elevations.cdr

Exhibit 3-14 City Hall and Transit Center Sections and Elevations

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



CITY CENTER 1B NOTES:

- 11. CITY HALL PLAZA VISITOR DROP-OFF
 - 12. CITY HALL COURTYARD - INLAID GRANITE ARCING BANDS ON GROUNDPLANE - FLOWERING CRAPE MYRTLES AND SHADED SEATING
 - 13. STORMWATER BMP - BIOSWALE
 - 14. CITY HALL FOUNTAIN
 - 15. BIKE RACKS
- NOTE: ITEMS 1. - 10. SEE NOTES ON SHEET L.1A - 2

CITY CENTER 1B PLANT LIST :

TREES	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE
WEST ENTRANCE	○ LONDON PLANE TREE	PLATANUS ACERIFOLIA 'COLUMBIA'*	19	15 GAL
CITY HALL COURTYARD	○ CRAPE MYRTLE	LAGERSTROEMIA 'NATCHEZ'	6	24' BOX
SECONDARY ROADS / PARKING	○ ASH	FRAXINUS UHDEI	11	15 GAL
BOLLINGER STREETSCAPE	○ CRAPE MYRTLE	LAGERSTROEMIA 'NATCHEZ'	3	24' BOX
	○ ENGLISH OAK	QUERCUS ROBUR	6	24' BOX
	○ STONE PINE	PINUS PINEA	3	24' BOX
SHRUBS	COTONEASTER XYLOSMA GLOSSY ABELIA ENGLISH LAUREL	COTONEASTER LACTEUS XYLOSMA CONGESTUM ALBELIA GRANDIFLORA PRUNUS LAUROCERASUS		5 GAL 5 GAL 5 GAL 5 GAL

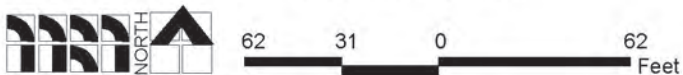
* THIS CULTIVAR IS HIGHLY RESISTANT TO SYCAMORE ANTHRACNOSE

TOTAL NUMBER OF TREES: 448 40% IN 24' BOX: 267 - 60% IN 15 GAL. CONTAINERS: 181
 SAN RAMON LANDSCAPE REQUIREMENTS: 30% OF TREES IN 24' BOX, 70% IN 15 GALLON CONTAINERS

	COMMON NAME	BOTANICAL NAME	SIZE
GROUNDCOVER	BOXWOOD	BUXUS MICROPHYLLA JAPONICA	5 GAL
	DAYLILY	HEMEROCALLIS	5 GAL
	FOUNTAIN GRASS	PENNISETUM ORIENTALE	5 GAL
	GIANT CHAIN FERN	WOODWARDIA FIMBRIATA	5 GAL
	HEAVENLY BAMBOO	NANDINA DOMESTICA	5 GAL
	LILY-OF-THE-NILE	AGAPANTHUS ORIENTALIS	5 GAL
	LILY TURF	LIRIOPE	5 GAL
	SWORD FERN	POLYSTICHUM CALIFORNICUM	5 GAL
	SPANISH LAVENDER	LAVENDULA STOECHAS	5 GAL
	STAR JASMINE	TRACHELOSPERMUM JASMINOIDES	5 GAL
	BIOSWALE	CALIFORNIA FESCUE	FESTUCA CALIFORNICA
CALIFORNIA GRAY RUSH		JUNCUS PATENS	1 GAL
SANTA BARBARA SEDGE		CAREX BARBERAE	1 GAL
SEDGE		CAREX ELATA 'BOWLES GOLDEN'	1 GAL
SWEET FLAG		ACORUS CALAMUS	1 GAL
YELLOW FLAG		IRIS PSEUDACORUS	1 GAL

APPROX. TOTAL OF SHRUBS AND GROUND COVER: 92,776 sq/ft
 APPROX. 75% IN 5 GAL CONTAINERS - APPROX. 25% IN 1 GAL CONTAINERS
 SAN RAMON LANDSCAPE REQUIREMENTS: 25% OF SHRUBS AND GROUNDCOVERS IN 5 GAL CONTAINERS, 75% IN 1 GAL

Source: Sunset Development Company, April 30, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 3-15_city_hall_transit_center_landscape.cdr

**Exhibit 3-15
 City Hall and Transit Center Landscaping Plan**

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
 DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Building Massing

Floor Area Ratio (FAR) provides a measurement of building massing and is calculated by divided project square footage (2,168,466) by the square footage of developable land area (1,702,760). The entire City Center project would have a 1.27 FAR, which is within the maximum allowable 1.35 FAR established in the Zoning Ordinance for the City Center Mixed Use (CCMU) zone.

Utilities and Infrastructure

Utilities and infrastructure systems including potable water, fire water, recycled water, wastewater, storm drainage, electricity, natural gas, street lighting, and sidewalks would be installed to serve the proposed project. Exhibit 3-16 shows the utility plan for the proposed project. Below is a summary of the necessary utility and infrastructure improvements. All project utility connections would be located underground.

Roadways

A number of roadway improvements would be implemented in conjunction with the proposed project. Each is discussed below.

Bishop Drive

Bishop Drive, an existing two-lane roadway, would be extended from its current terminus at the Bishop Ranch 3 parking structure east, then south to Bollinger Canyon Road to create a partial loop around the northern and eastern perimeters of the Plaza District. Bishop Drive would connect with Bollinger Canyon Road at the existing signalized intersection with the Bishop Ranch 1 East roadway. Bishop Drive would provide access to the Block A, Block E, and Blocks F-G parking structures. Between Sunset Drive and Bollinger Canyon Road, Bishop Drive would provide four lanes, as well as turn pockets at intersections and parking garage access points. As part of the roadway widening and extension, Class II bicycle lanes would be added, extending from their current terminus at Sunset Drive to the future intersection with Bollinger Canyon Road. The extended Class II bicycle facilities would run parallel to the Class I Iron Horse Trail along the east side of Blocks F-G and would connect to the trail via a designated pedestrian/bicycle crossing with pavement treatments to enhance the definition of the pedestrian space.

Center Street

Center Street, a two-lane roadway with on-street parking, would bisect the Plaza District east to west. It would begin at the existing signalized intersection of Sunset Drive and the Bishop Ranch 2 driveway and terminate at East Street. Center Street would intersect with West Street and Camino Ramon and provide access to the Block A, Block E, and Blocks F-G parking structures. Pedestrian crossings of streets within the Plaza District would have a pavement treatment to enhance the definition of the pedestrian space. Center Street would be privately owned and maintained.

West Street

West Street, a two-lane roadway with on-street parking, would provide a north-south linkage between Bishop Drive and Bollinger Canyon Road. Access to and from Bollinger Canyon Road would be

Project Description

provided via an access road serving the loading facilities for the hotel on Block C and the Anchor Store on Block D, as well as the hotel and Block D parking structures. The access road would have separate right-in, right-out access points. West Street would intersect with Center Street and provide access to the Block A, Block B, and hotel parking structures. Pedestrian crossings of streets within the Plaza District would have a pavement treatment to enhance the definition of the pedestrian space. West Street would be privately owned and maintained.

East Street

East Street, a two-lane roadway with on-street parking, would provide a north-south linkage between Bishop Drive and Bollinger Canyon Road. Access to and from Bollinger Canyon Road would be provided by a right-in, right-out access point. West Street would intersect with Center Street and provide access to the Block E parking structure. Pedestrian crossings of streets within the Plaza District would have a pavement treatment to enhance the definition of the pedestrian space. East Street would be privately owned and maintained.

Bishop Ranch 1 East

The existing two-lane Bishop Ranch 1 East roadway would be widened to four lanes between Bollinger Canyon Road and the Bishop Ranch 1 parking structure. The roadway would provide access to the Bishop Ranch 1A and Bishop Ranch 1 parking structures. On-street parking would be prohibited.

Bishop Ranch 1 Entrance Road

The existing Bishop Ranch 1 Entrance Road would be widened to provide two through lanes in the southbound direction and three through lanes in the northbound direction between Bollinger Canyon Road and the Bishop Ranch 1 roundabout. A right-in, right-out drop-off point would be provided in front of City Hall. Access to Bishop Ranch 1A and the Transit Center would be provided off the Bishop Ranch 1 Entrance Road.

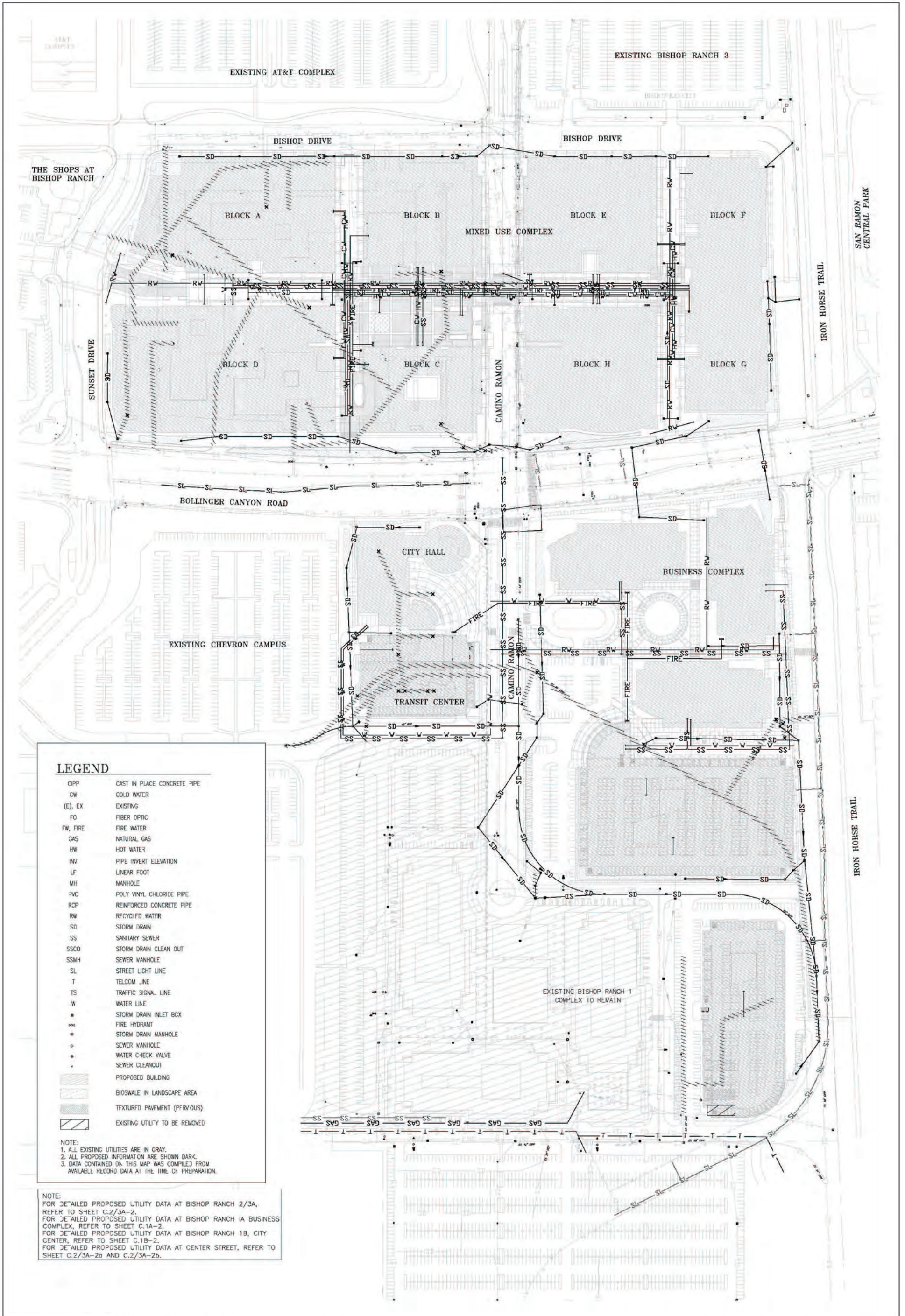
Bollinger Canyon Road

Bollinger Canyon Road would be widened between Camino Ramon and Bishop Drive to provide four through lanes in each direction. Two left-turn lanes would be installed in the eastbound direction at the Bishop Drive/Bishop Ranch 1 East intersection. The southernmost eastbound through lane would become a right-turn-only lane at Bishop Drive/Bishop Ranch 1 East intersection.

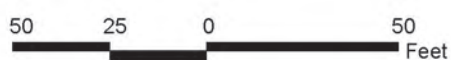
Potable Water

Bishop Ranch 1 and Bishop Ranch 2 are served by existing connections to the East Bay Municipal Utility District (East Bay MUD) water system. The Bishop Ranch 2 water connections would be removed as part of the proposed project.

Cold water, hot water, and standard water connections would serve the Plaza District. The project would provide onsite water chilling and heating facilities for the delivery of cold and hot water. The backbone water system would be located under Center Street, with branches located under West and



Source: Sunset Development Company, April 30, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 3-16_conceptual_utility_plan.cdr

Exhibit 3-16 Conceptual Utility Plan

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

East Streets. The Plaza District's water system would intertie with the East Bay MUD water system under Camino Ramon. The water lines serving Bishop Ranch 1A would be located under parking areas and internal roadways and would intertie with the East Bay MUD water system under the Bishop Ranch 1 entrance road and the Bishop Ranch 1 East roadway. The water lines serving the City Hall and Transit Center would be located under parking areas and internal roadways and would intertie with the East Bay MUD water system under the Bishop Ranch 1 entrance road.

Fire Water

A fire water system would branch off the potable water system. The Plaza District fire water system would be located under Camino Ramon. The fire water lines serving Bishop Ranch 1A would be located under parking areas and internal roadways.

Recycled Water

None of the parcels that make up the project site contain recycled water infrastructure. The proposed project's landscaped areas would be irrigated by recycled water provided by Dublin San Ramon Services District -East Bay MUD Recycled Water Authority (DERWA). The Plaza District, Bishop Ranch 1A, and the City Hall and Transit Center would all connect to the DERWA system.

Wastewater

Bishop Ranch 1 and Bishop Ranch 2 are served by existing connections to the Central Contra Costa Sanitary District (Central San) wastewater system.

The Plaza District's wastewater lines and laterals would be located under Center Street and intertie with the Central San sewer system under Camino Ramon. The wastewater lines serving Bishop Ranch 1A, City Hall, and Transit Center would be located under parking areas and internal roadways and would feed to a backbone line located under the Bishop Ranch 1 entrance road that would intertie with the Central San sewer system under Bollinger Canyon Road.

Storm Drainage

The project vicinity is currently drained by an existing 72-inch-diameter storm drain located under Camino Ramon that transitions to an 84-inch-diameter pipe south of Bollinger Canyon Road, and ultimately to a 96-inch-diameter within the Bishop Ranch 1 complex. The 96-inch-diameter pipe discharges into South San Ramon Creek, approximately 2,000 feet south of Parcel 1A. This storm drain is fed by inlets and piping located on Parcels 1A, 1B, and in Bishop Ranch 2. The development of the proposed project would require the removal of all existing storm drain infrastructure located on Parcels 1A and 1B, and in Bishop Ranch 2.

The proposed project would maintain the existing storm drain line under Camino Ramon and the Bishop Ranch 1 entrance road to a point approximately 200 feet south of Bollinger Canyon Road. From there, the existing storm drain would be removed because it veers east and crosses the footprint of the Bishop Ranch 1A parking structure. A replacement storm drain would be installed around the

Project Description

south side of the parking structure and would reconnect with the remainder of the existing 96-inch-diameter storm drain that discharges into South San Ramon Creek.

Electricity

Bishop Ranch 1 and Bishop Ranch 2 are currently served by the Pacific Gas and Electric Company (PG&E) electrical system. The existing Bishop Ranch 2 electrical infrastructure would be removed during demolition. New underground electrical infrastructure would be installed to serve the proposed project.

Natural gas

Bishop Ranch 1 and Bishop Ranch 2 are currently served by the PG&E natural gas system. The existing Bishop Ranch 2 natural gas infrastructure would be removed during demolition. New underground natural gas infrastructure would be installed to serve the proposed project.

Street Lighting

Street lighting is currently in place along Bollinger Canyon Road, Camino Ramon, Bishop Drive, the Bishop Ranch 1 entrance road, and the Bishop Ranch 1 East roadway. The proposed project would add street lighting along the new streets within the Plaza District and along the median of Bollinger Canyon Road between Sunset Drive and Camino Ramon.

Phone, Fiber Optic, Cable and other Secondary Utilities

The project site is currently served by several independent secondary utilities that provide electronic communications (phone, fiber optic, cable, etc.). Providers include AT&T and Comcast. During the course of construction, it may be necessary to upgrade or relocate certain utilities to serve the proposed project. Maintenance and improvements to existing secondary infrastructure has been anticipated as part of the proposed project and are included in the scope of construction.

Sidewalks

Continuous, uninterrupted sidewalks exist along the south side of Bollinger Canyon Road, the east side of Camino Ramon, the east side of Sunset Drive, both sides of the Bishop Ranch 1 entrance road, and the west side of the Bishop Ranch 1 East road. A sidewalk is present along the north side of Bollinger Canyon Road along the Parcel 3A frontage. No sidewalks or only short segments of sidewalk are present along the north, east, or south sides of Bishop Ranch 2. The proposed project would install new, continuous, uninterrupted sidewalks along all project frontages.

Project Phasing and Construction Schedule

The phasing and construction schedule for each project component is provided below.

Plaza District

The Plaza District would be developed in one phase. Demolition of Bishop Ranch 2 would begin in mid-2008, and construction would begin shortly thereafter. The Plaza District would be completed by November 2010.

Bishop Ranch 1A

The three Bishop Ranch 1A office buildings would be developed in three phases. Construction on the first building would begin in mid-2008, the second in mid-2009, and the third in mid-2010.

Construction for each building would take 14 months.

The three parking structures associated with Bishop Ranch 1 and Bishop Ranch 1A would be constructed concurrently with the office buildings. Construction on the Bishop Ranch 1A parking structure would begin in mid-2008, the Bishop Ranch 1 parking structure would begin in mid-2009; and the shared parking structure would begin in mid-2010. Construction for each structure would take 10 months.

City Hall and Transit Center

The City Hall and Transit Center would be developed in one phase. Construction would begin in mid-2009 and would take 18 months.

Sustainability Features

The proposed project's sustainability features are discussed below, including its consistency with smart growth policies, and its trip reduction and energy and water conservation measures.

Consistency with Smart Growth Policies

Although definitions vary, "Smart Growth" generally refers to land use planning and development activities intended to sustainably balance the needs of population growth with environmental, fiscal, social, and technological constraints. Five regional agencies (Association of Bay Area Governments [ABAG], Bay Area Air Quality Management District, Bay Conservation and Development Commission, Metropolitan Transportation Commission, and the San Francisco Bay Regional Water Quality Control Board), along with the Bay Area Alliance for Sustainable Communities, developed a set of smart growth policies for the nine-county San Francisco Bay Area region. The policies are summarized below:

- **Jobs/Housing Balance and Match:** Improve the jobs/housing linkages through the development of housing in proximity to jobs, and both in proximity to public transportation. Increase the supply of affordable housing and support efforts to match job income and housing affordability levels.
- **Housing and Displacement:** Improve existing housing and develop sufficient new housing to provide for the housing needs of the Bay Area community. Support efforts to improve housing affordability and limit the displacement of existing residents and businesses.
- **Social Justice and Equity:** Improve conditions in disadvantaged neighborhoods, ensure environmental justice, and increase access to jobs, housing, and public services for all residents in the region.

- **Environmental, Natural Resource, Open Space, and Agricultural Preservation:** Protect and enhance open space, agricultural lands, other valued lands, watersheds, and ecosystems throughout the region. Promote development patterns that protect and improve air quality. Protect and enhance the San Francisco Bay and Estuary.
- **Mobility, Livability and Transit Support:** Enhance community livability by promoting infill, transit oriented and walkable communities, and compact development as appropriate. Develop multi-family housing, mixed-use development, and alternative transportation to improve opportunities for all members of the community.
- **Local and Regional Transportation Efficiencies:** Promote opportunities for transit use and alternative modes of transportation including improved rail, bus, high occupancy (HOV) systems, and ferry services as well as enhanced walking and biking. Increase connectivity between and strengthen alternative modes of transportation, including improved rail, bus, ride share and ferry services as well as walking and biking. Promote investments that adequately maintain the existing transportation system and improve the efficiency of transportation infrastructure.
- **Infrastructure Investments:** Improve and maintain existing infrastructure and support future investments that promote smart growth, including water and land recycling, brownfield cleanup and re-use, multi-use and school facilities, smart building codes, retention of historic character and resources, and educational improvements.
- **Local Government Fiscal Health:** Improve the fiscal health of local government by promoting stable and secure revenue sources, reduced service provision costs through smart growth targeted infrastructure improvement, and state and regional sponsored fiscal incentives. Support cooperative efforts among local jurisdictions to address housing and commercial development, infrastructure costs, and provision of services.
- **Cooperation on Smart Growth Policies:** Encourage local governments, stakeholders, and other constituents in the Bay Area to cooperate in supporting actions consistent with the adopted Smart Growth policies. Forge cooperative relationships with governments and stakeholders in surrounding regions to support actions that will lead to inter-regional Smart Growth benefits.

The proposed project is an infill mixed-use project that would locate housing, employment opportunities, retail, civic uses, entertainment, and a Transit Center within a compact and focused destination. The proposed project would also be located adjacent to the Iron Horse Trail, a regional Class I bicycle/pedestrian facility. The proposed project's residential component contains inclusionary affordable housing for households making below median income. As an infill project in an existing urbanized area, the project reuses existing urban land and infrastructure and avoids greenfield development and the need to extend urban infrastructure into undeveloped areas. The proposed project is a public-private effort that minimizes the fiscal burden on local government, while

providing new sources of tax revenue to support local services. The City of San Ramon is actively seeking a Priority Development Area designation for the City Center project area as part of the ABAG's Regional "Focusing Our Vision" effort. The program encourages smart growth principles, many of which have been incorporated into the proposed project.

The proposed project is consistent with a number of these smart growth policies. The proposed project is an infill mixed-use project that would locate housing, employment opportunities, retail, civic uses, and entertainment in a single destination. The proposed project would also contain a transit center and be located adjacent to the Iron Horse Trail, a regional Class I bicycle/pedestrian facility. The proposed project's residential component contains inclusionary affordable housing for households making below median income. As an infill project in an existing urbanized area, the project reuses existing urban land and infrastructure and avoids greenfield development and the need to extend urban infrastructure into undeveloped areas. The proposed project is a public-private effort that minimizes the fiscal burden on local government, while also providing new sources of tax revenue.

In addition, to its consistency with smart growth policies, the proposed project would incorporate a variety of design features intended to promote sustainability through trip reduction and energy and water conservation. These features are listed by category.

Trip Reduction

- Inclusion of a Transit Center that would be served by County Connection bus service, which would provide service to local communities and the Dublin/Pleasanton and Walnut Creek BART stations
- Creating a pedestrian-oriented environment in the Plaza District by limiting parking to on-street spaces and parking structures; no off-street parking would be provided in front of Plaza District buildings, thereby enhancing pedestrian safety and mobility
- Developing high-density residential uses in the Plaza District within walking or biking distance of employment centers (Bishop Ranch Business Park), commercial retail centers (Plaza District retail, The Shops at Bishop Ranch, The Market Place), and public facilities (City Hall, Transit Center, Library, Central Park, and San Ramon Community Center)
- Direct "crow flies" pedestrian and bicycle connections to the Iron Horse Trail from the Plaza District and Bishop Ranch 1A
- Pedestrian connections to surrounding land uses, including The Shops at Bishop Ranch, Bishop Ranch 1, Bishop Ranch 3, Chevron Park, and the AT&T campus
- Extension of Bishop Drive Class II bicycle facilities from Sunset Drive to Bollinger Canyon Road
- Bicycle storage facilities in convenient and secure locations

Energy and Water Conservation

- A recycled water system for landscape irrigation that eliminates the need to use potable water for outdoor watering
- Extensive use of glass windows in all project components, particularly in upper floors, to promote natural day lighting of interior areas to reduce the need for lighting
- Automated occupancy sensors in structures that automatically shut off lights when rooms are unoccupied
- Participation in PG&E energy efficiency rebate programs (e.g., air conditioning, gas heating, refrigeration, and lighting)
- High-efficiency clothes washers and dishwashing machines to reduce energy and water consumption
- Re-circulating hot water systems to reduce the need to heat water
- Tankless hot water heaters that reduce water consumption
- Green roofs that capture stormwater runoff during the rainy season and keep building interiors cool during warmer months
- Bioswales that promote percolation of stormwater runoff and reduce the need for pumping stormwater through a conveyance system
- Evapotranspiration-based water controllers that adjusts outdoor irrigation in response to weather conditions
- Water budgets for landscape irrigation to monitor and regulate outdoor water usage
- High efficiency toilets in non-residential buildings to reduce water usage

3.3 - Project Objectives

The objectives of the proposed project are as follows:

- Strengthen San Ramon and Bishop Ranch with a vibrant mix of complementary uses including retail, residential, office, hotel, and civic
- Develop a new, vital neighborhood for living, working, shopping, dining, entertaining, learning, and gathering
- Create new, beautiful, landscaped public spaces to accommodate community and cultural events
- Replace the outdated and undersized current City offices and Council Chamber with a new municipal campus with modern, adequately-sized facilities to serve the ever-increasing demands of planned growth in San Ramon

- Enhance the public safety in San Ramon through the provision of a state-of-the-art Police Department headquarters
- Improve the delivery and quality of library services to San Ramon residents through the provision of a larger, technologically advanced library
- Increase mobility, reduce greenhouse gas emissions, and promote energy conservation in San Ramon, Bishop Ranch, and the proposed project through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers
- Capitalize on the proposed project's adjacency to the Iron Horse Trail to promote the use of pedestrian and bicycle modes of transportation and encourage trip and greenhouse gas reduction and energy conservation
- Encourage trip and greenhouse gas reduction and energy conservation throughout San Ramon, Bishop Ranch, and the proposed project through the siting of residential and office uses near shopping, dining, and entertainment
- Establish public improvements, including landscaped sidewalks, plazas, and pedestrian connections; streets; parking structures; and a new "ring road" extending Bishop Drive to Bollinger Canyon Road
- Add new experiences at Bishop Ranch and to the San Ramon community, including a five-star hotel, an art-screen cinema, new gourmet restaurants, and destination retail attractions
- Include high-quality, high-density housing in a mixed-use setting to increase the diversity of housing opportunities in San Ramon and provide a type of housing option that is not currently available to local residents
- Use high -quality architecture and landscaping consistent with the style of Bishop Ranch that will maintain and enhance the aesthetic character of the City of San Ramon
- Maximize roadway safety through the provision of multiple vehicular ingress and egress opportunities to the proposed project internal roadways and parking facilities and improvements to the surrounding circulation system
- Create increased new property and sales taxes annually, in perpetuity, for the City of San Ramon, and increased annual property taxes for Contra Costa County and various other local government agencies
- Increase property values throughout San Ramon and the San Ramon Valley
- Reduce regional freeway impacts resulting from dependency on regional urban centers to meet retail and entertainment needs by encouraging mixed use and infill development with localized entertainment and retail opportunities

3.4 - Intended Uses of This Draft EIR

This DSEIR is being prepared by the City of San Ramon to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of San Ramon is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The DSEIR is intended to address all public infrastructure improvements and all future development that are within the parameters of the proposed project.

3.4.1 - Discretionary and Ministerial Actions

As identified previously, discretionary approvals and permits are required by the City for implementation of the proposed project. The project application would require a number of discretionary approvals and actions, including:

- Vesting Tentative and Final Map(s)
- Development Plan and Development Plan Amendment (Amendment to City DP-00-300-001)
- Development Agreement Amendments (Fifth Amendment to City/Sunset Annexation and Development Agreement; Third Amendment to City/Chevron [Sunset Assumption] Annexation and Development Agreement)
- Conditional Use Permits for Hotel and Cinema uses
- Minor Use Permits (e.g., alcohol beverage service, outdoor seating, parking garages, etc.)
- Architectural Review
- Major /Minor Subdivisions
- Lot Line Adjustment
- Exercising Options for Land Acquisition (e.g., roadway improvements)

The project application would require a number of ministerial approvals and actions, including:

- Demolition Permits
- Encroachment Permits
- Site Development Permits
- Grading Permits
- Building Permits
- Occupancy Permits
- Utility Relocation

3.4.2 - Responsible and Trustee Agencies

A number of other agencies in addition to the City of San Ramon will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Sections 15381 and 15386, respectively. This DSEIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with as part of project implementation. These agencies may include, but are not limited to, the following:

- U.S. Fish and Wildlife Service
- California Department of Fish and Game
- California Department of Transportation
- San Francisco Regional Water Quality Control Board
- East Bay Municipal Utility District
- Central Contra Costa Sanitary District
- Dublin San Ramon Services District/East Bay Municipal Utility District Recycled Water Authority
- Bay Area Air Quality Management District

Other actions that must be taken by other agencies necessary to implement the project are:

- **Obtain Road Easements, Right-of-Entry, and Permits.** The project would require road easements and a right-of-entry permit (through an encroachment permit) for road improvements on Bollinger Canyon Road, Camino Ramon, Bishop Drive, Sunset Drive, the Bishop Ranch 1 East roadway, and the Bishop Ranch 1 entrance road. This encroachment permit would be obtained from the City of San Ramon Engineering Department.
- **Obtain Coverage Under the General Construction Permit.** Project construction would require coverage under the General Construction Permit issued to the State Water Resources Control Board and administered locally by the San Francisco Regional Water Quality Control Board (RWQCB). A Storm Water Pollution Prevention Plan must be submitted in order to obtain the permit. The RWQCB would act as a CEQA responsible agency.
- **Obtain Approval of a Water Quality Management Plan.** The project would require a water quality management plan that identifies Best Management Practices (BMPs) and Operations and Maintenance procedures that would ensure that runoff discharge from the project site does not degrade downstream water bodies.

SECTION 4: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Draft Subsequent Environmental Impact Report (DSEIR) provides analysis of impacts for those environmental topics where it was determined in the Initial Study, as provided in Appendix A, or through subsequent analysis that the proposed project would result in “potentially significant impacts.” Sections 4.1 through 4.14 discuss the environmental impacts that may result with approval and implementation of the proposed project.

Issues Addressed in this EIR

The following environmental issues are addressed in this chapter:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Urban Decay
- Utility Systems

Each environmental issue area in Sections 4.1 through 4.14 contains a description of:

1. The environmental setting as it relates to the specific issue
2. The regulatory framework governing that issue
3. The methodology used in identifying the issues
4. The significance criteria
5. An evaluation of the project-specific impacts and identification of mitigation measures
6. A determination of the level of significance after mitigation measures are implemented

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA. CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Final Subsequent EIR (FSEIR). If the FSEIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the FSEIR.

The level of significance for each impact examined in this DSEIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

As a tiered SEIR, the analysis in this document considers the incremental change in impact when compared with the previous City of San Ramon General Plan EIR and City Civic Center EIR. Where appropriate, this document evaluates impacts in relation to net change in development on the project site considering the demolition of Bishop Ranch 2 and the vested office entitlement on Parcel 1A.

Impact Analysis and Mitigation Measure Format

The format adopted in this DSEIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AES-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact abbreviation identifies the section of the report (AES for Aesthetics, Light, and Glare in the example) and the sequential order of the impact (1 in the example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.

Impact Analysis

A narrative analysis follows the impact statement.

Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to State and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AES-1a Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact with which it is associated (**AES-1** in this example); the letter identifies the sequential order of that mitigation for that impact (**a** in this example).

Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

4.1 - Aesthetics, Light, and Glare

4.1.1 - Introduction

This section describes the existing aesthetics, light, and glare and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on site reconnaissance performed by Michael Brandman Associates (MBA); project renderings prepared by Cooper, Robertson & Partners; visual simulations of the project prepared by Gates and Associates; and shade and shadow simulations prepared by Focus 360.

As explained in Section 1, Introduction, this project-level Draft Subsequent Environmental Impact Report (DSEIR), where applicable, tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts related to aesthetics, light, and glare were less than significant after mitigation, as discussed in Section 4.1 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all impacts related to aesthetics, light, and glare were less than significant and did not require mitigation, as discussed in Section 4.7 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.1.2 - Environmental Setting

Visual Setting

San Ramon Valley

The San Ramon Valley stretches from Alamo in the north to Dublin in the south and is characterized by low rolling foothills to the west and east. The valley bottom is mostly developed with urban uses, while significant portions of the hillsides and nearly all of the ridgelines have remained undeveloped. Mt. Diablo, elevation 3,849 feet above mean sea level, is the most prominent visual feature in the region and is located northeast of the San Ramon Valley. West of the City limits is Wiedemann Hill, elevation 1,850 feet above mean sea level. Most of the prominent western slopes of Wiedemann Hill are undeveloped and contain clusters of oak woodlands. Within the City limits are the Dougherty Hills, which separate the San Ramon Valley from the Dougherty Valley to the east. The sides and ridgelines of the Dougherty Hills contain urban development, most notably the Canyon Lakes Golf Course and the Canyon Lakes commercial center. Additional development on the sides and

ridgelines of the Dougherty Hills is associated with the Old Ranch area in the southern portion of the City limits.

Project Site

The project site consists of four parcels, described individually below. Photos of the project site are provided in Exhibit 3-3a through Exhibit 3-3e.

Parcel 1A

Parcel 1A consists of 14.27 acres of undeveloped land and developed parking areas associated with Bishop Ranch 1. The northern portion of Parcel 1A contains approximately 7.56 acres of an undeveloped City-owned rectangular-shaped property. This land consists of ruderal vegetation, with ornamental landscaping dominated by mature trees surrounding the property on all four sides. This portion of the parcel contains fill imported from other nearby parcels that have been developed. The southern 6.71-acre portion of Parcel 1A contains parking areas associated with Bishop Ranch 1. The parking areas are characterized as at-grade, asphalt-paved with landscaped islands. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 East roadway. Photographs of Parcel 1A are shown in Exhibits 3-3d and 3-3e.

Parcel 1B

Parcel 1B consists of approximately 3.52 acres of a developed parking area associated with Bishop Ranch 1. The parking area is characterized as at-grade, asphalt-paved with landscaped islands. Ornamental landscaping surrounds the parcel on the west, north, and east sides. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 entrance road. Photographs of Parcel 1B are shown in Exhibits 3-3c and 3-3d.

Parcel 2

Parcel 2 consists of the existing 14.57-acre Bishop Ranch 2 office complex. Bishop Ranch 2 contains 194,652 square feet of office space spread amongst four multi-story office structures with an interior turf courtyard landscaped area. Parking areas are located around the perimeter of the parcel and are characterized as at-grade, asphalt-paved areas with landscaped islands. Ornamental landscaping, dominated by mature redwood and hardwood trees, is present along its frontages with Sunset Drive, Bishop Drive, Camino Ramon, and Bollinger Canyon Road. Sidewalks are present along its entire frontage with Sunset Drive and portion of its frontage with Bishop Drive. Photographs of Parcel 2 are shown in Exhibits 3-3b and 3-3c.

Parcel 3A

Parcel 3A is an undeveloped 11.29-acre City-owned parcel containing ruderal vegetation. A storage container surrounded by fencing is located in the eastern portion of the parcel. The parcel contains fill imported from other nearby parcels that have been developed. Ornamental landscaping is present along its frontage with Camino Ramon. Sidewalks are present along its frontages with Camino

Ramon and Bollinger Canyon Road. The site is used for temporary parking and special events such as car shows and festivals. Photographs of Parcel 3A are shown in Exhibits 3-3a and 3-3b.

Surrounding Land Uses

The project vicinity is comprised of existing developments that include commercial and residential uses, as well as public places for recreational uses. A summary of surrounding uses for each parcel is provided in Table 4.1-1.

Table 4.1-1: Surrounding Land Use Summary

Parcel No.	Surrounding Land Uses			
	West	North	East	South
1A	Bishop Ranch 1 office structure and Bishop Ranch 1 entrance road; parking lot (Parcel 1B)	Bollinger Canyon Road; Parcel 3A	Bishop Ranch 1 East roadway; Iron Horse Trail; Market Place commercial uses (i.e., Marriot Residence Inn and Orchard Supply Hardware); Reflections Condominiums	Bishop Ranch 1 East roadway; Bishop Ranch 1 surface parking area; single-family residential uses
1B	Chevron Park, including buildings and parking areas	Bollinger Canyon Road; Parcel 2	Bishop Ranch 1 entrance road; Parcel 1A	Bishop Ranch 1 office structure; Bishop Ranch 1 surface parking areas
2	Sunset Drive; Shops at Bishop Ranch	Bishop Drive; AT&T campus	Camino Ramon; Parcel 3A	Bollinger Canyon Road; Chevron Park; parking lot (Parcel 1B)
3A	Camino Ramon	Bishop Ranch 3 parking structure; Bishop Ranch 3 office structure	Iron Horse Trail; Watson Canyon Drainage; Central Park	Bollinger Canyon Road; Parcel 1A; Bishop Ranch 1 office structure

Source: Michael Brandman Associates, 2007.

Views

Views are described in terms of what can be seen from the parcels comprising the project site, as well as from locations from which the parcels can be seen. Views from the project site are important, since the project will involve development of public places and residential units and since there are nearby residences and public places from which the project features will be visible.

Views from the Project Site

Views from the project site are shown in Exhibit 4.1-1a and Exhibit 4.1-1b.

Parcel 1A

Ornamental landscaping surrounds the developed and undeveloped portions of Parcel 1A and partially obstructs views of surrounding land uses. Bishop Ranch 1 and Chevron Park office

structures, including the 125-foot communications tower, are visible to the west and south. Bollinger Canyon Road, Parcel 3A, the Bishop Ranch 3 parking garage, the Iron Horse Trail, and vegetation associated with Central Park are visible to the north. Vegetation associated with the Iron Horse Trail and the rooflines of the Marriot Residence Inn, the Orchard Supply Hardware, and the Reflections Condominiums are partially visible to the east. Views from Parcel 1A are shown in Exhibits 4.1-1a and 4.1-1b.

Parcel 1B

Ornamental landscaping surrounds Parcel 1B and partially obstructs views of surrounding land uses. The rooflines of structures in Chevron Park are visible to the west. Bollinger Canyon Road and ornamental landscaping on the perimeter of Bishop Ranch 2 are visible to the north. The Bishop Ranch 1 entrance roadway and Parcel 1A are visible to the east. The Bishop Ranch 1 office structures are visible to the south. Views from Parcel 1B are shown in Exhibit 4.1-1b.

Parcel 2

Ornamental landscaping surrounds Parcel 2 and partially or completely obstructs views of surrounding land uses. Sunset Drive and the Shops at Bishop Ranch are partially visible to the west. Bishop Drive and ornamental landscaping associated with the AT&T campus are visible to the north. Views to the east are almost entirely obstructed by ornamental vegetation; however, Camino Ramon and Parcel 3A are partially visible in some places. Views to the south are almost entirely obstructed by ornamental vegetation; however, Bollinger Canyon Road, Parcel 1A, and vegetation associated with Chevron Park are partially visible in some places. Views from Parcel 2 are shown in Exhibit 4.1-1b.

Parcel 3A

Camino Ramon and vegetation associated with Bishop Ranch 2 are visible to the west. The Bishop Ranch 3 parking structure and the roofline of one of the Bishop Ranch 3 office buildings is visible to the north. The Iron Horse Trail and vegetation associated with Watson Canyon Drainage within Central Park are visible to the east. (Note that Watson Canyon Drainage is a man-made drainage channel that is also known as Watson Canyon Creek.) Bollinger Canyon Road, vegetation associated with Parcel 1A, and the rooflines of Bishop Ranch 1 and Chevron Park are visible to the south. Views from Parcel 3A are shown in Exhibits 4.1-1a and 4.1-1b.

Views from Surrounding Land Uses

A summary of views from surrounding land uses is provided below. Viewer sensitivity tends to be highest from public places, such as Bollinger Canyon Road, Camino Ramon, Central Park, and the Iron Horse Trail. Views from surrounding land uses are provided in Exhibits 4.1-2a and 4.1-2b.



View of Bishop Ranch 3 and Camino Ramon from Parcel 3A.



View of Bishop Ranch 3 from Parcel 3A.



View of Bollinger Canyon Road from Parcel 3A.



View Iron Horse Trail, Central Park, and Bishop Ranch 3 from Parcel 1A.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

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Exhibit 4.1-1a Views From Project Site

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View of The Shops at Bishop Ranch from Parcel 2.



View of Chevron Park from Parcel 2.



View of Bishop Ranch 1 from Parcel 1B.



View of Bishop Ranch 1 East Roadway and the Iron Horse Trail from Parcel 1A.

Source: Michael Brandman Associates, 2007.



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Exhibit 4.1-1b Views From Project Site

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View of Parcels 1A, 1B, and 3A from Bishop Ranch 3.



View of Parcel 3A from the Iron Horse Trail.



View of Parcel 3A from Central Park.



View of Parcel 3A from Central Park.

Source: Michael Brandman Associates, 2007.



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Exhibit 4.1-2a Views From Surrounding Land Uses

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View of Parcel 1B from Bishop Ranch 1.



View of Parcel 2 from Chevron Park.



View of northern portion of Parcel 1A from Iron Horse Trail.



View of southern portion of Parcel 1A from Iron Horse Trail.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

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Exhibit 4.1-2b Views From Surrounding Land Uses

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Bollinger Canyon Road

Bollinger Canyon Road has unobstructed views of Parcel 3A; landscaping and berms partially obstructed views of Parcels 1A, 1B, and 2. Views of the Dougherty Hills and Wiedemann Hill are available from vantage points along Bollinger Canyon Road.

Camino Ramon

Landscaping partially obstructs views of Parcels 1A, 1B, 2, and 3 from Camino Ramon. Generally, only partial views of the Dougherty Hills and Wiedemann Hill are available because of the presence of landscaping and large multi-story office buildings on either side of the roadway.

Bishop Ranch 1

The north and east facing upper floor offices of Bishop Ranch 1 have unobstructed views of Parcels 1A and 1B, and partially obstructed views of Bishop Ranch 2 and Parcel 3A. Ground and lower floor views of Parcels 1A and 1B are partially obstructed by ornamental landscaping. Views of the Dougherty Hills and Wiedemann Hill are available from Bishop Ranch 1.

Iron Horse Trail

North of Bollinger Canyon Road, the Iron Horse Trail has unobstructed views of Parcel 3A. Views of Parcel 2 are obstructed by ornamental landscaping along Camino Ramon. South of Bollinger Canyon Road, views of Parcel 1A are mostly obstructed by ornamental vegetation located with the trail right-of-way. Views of the Dougherty Hills and Wiedemann Hill are available from the trail.

Market Place

The Marriot Residence Inn is the only Market Place tenant with direct views of the project site. Several upper floor rooms have unobstructed views of Parcel 1A and partial views of Parcel 3A; however, most upper floor room views are entirely or partially obstructed by ornamental landscaping. Views from lower floor rooms are obstructed by a 6-foot high wood fence located along the property line with the Iron Horse Trail. Views of the Dougherty Hills and Wiedemann Hill are available from the Market Place.

Reflections Condominiums

Views of Parcel 1A from upper floors of the Reflections Condominiums located east of the Iron Horse Trail are almost entirely obstructed by ornamental landscaping. Views from lower floor rooms are obstructed by a 6-foot high wood fence located along the property line with the Iron Horse Trail. Views of the Dougherty Hills and Wiedemann Hill are available from the Reflections Condominiums.

Single-Family Residences

The single-family residences located south of Bishop Ranch 1 have only distant, partial views of the southern portion of Parcel 1A. In addition, ornamental landscaping present along the fence line of these residences also obstructs views to the north. Views of the Dougherty Hills and Wiedemann Hill are available from the single-family residences.

Chevron Park

The structures within Chevron Park are located in the center of the property and dense vegetation surrounds the perimeter. A 125-foot communications tower is located in the center of the campus. With the exception of the tower, which is unoccupied, there are virtually no unobstructed views of Parcel 1B or Parcel 2 from the upper or lower floors of the Chevron Park structures. Views of the Dougherty Hills and Wiedemann Hill are available from Chevron Park.

Shops at Bishop Ranch

The Shops at Bishop Ranch structures are situated along the perimeter of the property and are oriented towards the parking lot. As such, the building orientation obstructs most views of Bishop Ranch 2. Views of Bishop Ranch 2 are available at the signalized entry point with Sunset Drive and from the eastern edge of the Whole Foods store and parking area. Views of the Dougherty Hills and Wiedemann Hill are available from The Shops at Bishop Ranch.

AT&T Campus

The ornamental landscaping located around the eastern and southern perimeters of AT&T campus partially or entirely obstructs views of Bishop Ranch 2 and Parcel 3A. Views of the Dougherty Hills and Wiedemann Hill are available from the AT&T campus.

Bishop Ranch 3

The Bishop Ranch 3 parking structure and the upper floors of the Bishop Ranch 3 office buildings have unobstructed views of Parcel 3A and Bishop Ranch 2 and distant, partial views of Parcels 1A and 1B. Views from the ground and lower floors are obstructed by the parking structure. Views of the Dougherty Hills and Wiedemann Hill are available from Bishop Ranch 3.

Central Park

Generally, views to the west from Central Park are obstructed by dense vegetation located along Watson Canyon Drainage. However, unobstructed views of Parcel 3A are available at gaps in the vegetation and at bridge crossings of the creek. Views of the Dougherty Hills and Wiedemann Hill are available from Central Park.

State Scenic Highways

The 29.9-mile segment of Interstate 680 (I-680) between Mission Boulevard in Fremont and State Route 24 in Walnut Creek is classified as an “Officially Designated” State Scenic Highway. The nearest portion of the project site to I-680 is Parcel 2, which is approximately 1,400 feet from the freeway right-of-way. Exhibit 4.1-3 shows various view angles from I-680 near the Bollinger Canyon Road interchange.

Light and Glare

The project vicinity is comprised of developed commercial and residential land uses; two of the four parcels comprising the project site are developed. Below is a summary of existing sources of light and glare on each parcel.



View of the northbound on-ramp to Interstate 680.



View of the Bollinger Canyon Road overcrossing of Interstate 680.



View from the northbound on-ramp to Interstate 680.



View from southbound Interstate 680.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

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Exhibit 4.1-3 Views From Interstate 680

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Parcels 1A and 1B

The Bishop Ranch 1 parking areas contain freestanding lights approximately 25 feet above grade. Nearby sources of light include building lighting associated with Bishop Ranch 1, street lighting along the Bishop Ranch 1 East roadway, the Bishop Ranch 1 entrance road, and Bollinger Canyon Road, and pedestrian lighting located along the sidewalk parallel to roadways within Bishop Ranch 1. Vehicular headlights also generate light within the Bishop Ranch 1 parking areas and along nearby roadways.

Parcel 2

Bishop Ranch 2 contains exterior and interior building lighting, freestanding parking lot lights approximately 25 feet above grade, and pedestrian lighting located within the courtyard area. Nearby sources of light include street lighting along Sunset Drive, Bishop Drive, Camino Ramon, and Bollinger Canyon Road, and illuminated signs and exterior building lighting in the Shops at Bishop Ranch. Vehicular headlights also generate light within the Bishop Ranch 2 parking areas and along nearby roadways.

Parcel 3A

There are no existing sources of light on Parcel 3A. Nearby sources of light include street lighting along Camino Ramon and Bollinger Canyon Road, lighting in the Bishop Ranch 3 parking structure, and athletic and basketball court lighting in Central Park. Parcel 3A receives a substantial amount of light spillover from vehicular headlights along nearby roadways.

4.1.3 - Methodology

MBA performed site reconnaissance of the four parcels comprising the project site and surrounding land uses on multiple occasions. Photographs were taken of all four parcels, surrounding land uses, and view corridors to document existing conditions. Cooper, Robertson & Partners prepared renderings of the Plaza District component and Hoover Associates prepared renderings of the Bishop Ranch 1A, City Hall, and Transit Center components. Gates and Associates prepared visual simulations of the project site showing before and after views from surrounding land uses. Focus 360 prepared shade and shadow simulations for summer and winter solstice scenarios to identify worst-case impacts.

4.1.4 - Regulatory Framework

Local

City of San Ramon General Plan

The City of San Ramon General Plan sets forth the following goals and policies related to scenic vistas, visual character, and light and glare:

- **Policy 2.4-I-14:** Use development controls to minimize adverse visual effects of the transportation components of development.

- **Policy 4.6-I-18:** Ensure that neighborhood retail centers and commercial service buildings are compatible with the surrounding neighborhood and incorporate a 360° design element.
- **Policy 4.6-I-22:** Establish design standards for mixed use development that will result in a high quality pedestrian-scaled environment, with one-to-four-story buildings, side or rear parking areas, street front windows and entries, and public and private open space.
- **Policy 4.6-I-24:** Allow for the revitalization and intensification of infill sites within the Bishop Ranch Business Park, consistent with FAR limitations, and amend the Zoning Ordinance so that they do not inhibit appropriate infill development.
- **Policy 4.8-I-2:** Ensure that the design, location, and size of new development blends with the environment and a site's natural features.
- **Policy 4.8-I-3:** Establish citywide lighting standards to ensure appropriate illumination levels for residential, commercial, and industrial land uses, and that lighting is of a consistent character and quality while reducing light pollution.
- **Policy 4.8-I-8:** Use the development review process to ensure that new development preserves and/or enhances significant views of the natural landscape.
- **Policy 4.8-I-9:** Continue to implement landscaping guidelines for public roadways that improve their visual character.
- **Policy 4.8-I-10:** Continue to implement gateway treatments for City entries that help residents and visitors know they have arrived in San Ramon.
- **Policy 4.8-I-11:** Require new office and commercial development to provide outdoor art that is clearly visible to the public.
- **Policy 4.8-I-13:** Require appropriate landscape treatment for public rights-of-way in all new residential, office, and commercial development.
- **Policy 4.8-I-14:** Ensure that businesses provide signs that are attractive and consistent with neighboring commercial uses, minimize visual clutter from roadways and other public areas, and, where possible, cannot be seen from residential neighborhoods.
- **Policy 4.8-I-17:** Establish urban design standards in the Zoning Ordinance for large-scale office development, including:
 - Limitations on maximum building height (five stories/75 feet)
 - Maximum vertical wall dimensions without a minimum upper-story stepback or setback (four stories/65 feet)
 - Required upper-story setbacks above four stories (1:1)

- Limitations on projections above height limits for towers, spires, and technical features, such as elevator penthouses and mechanical equipment enclosures (up to 25 percent of total roof area)
- Limitations on blank walls visible from public streets
- Sun access planes adjacent to public parks (1:3.5) to prevent substantial shadow impacts

The City Center Mixed Use zone (CCMU) is excluded from the requirements of Policy 4.8-I-17, with the exception of the sun access plane requirements adjacent to public parks. (Refer to Impacts AES-1 and AES-3 for further discussion of this policy.)

- **Policy 4.8-I-18:** Allow encroachments into the sun access plane to provide architectural flexibility. This may be done by allowing, for example, a 15-foot vertical projection above the sun access plane for up to 25 percent of the length of the lot line opposite the public park.
- **Policy 4.8-I-21:** Require all walls and fences to be designed to minimize visual monotony.
- **Policy 4.8-I-22:** Encourage underground parking in new development, where feasible.

San Ramon Zoning Ordinance

The project site parcels are zoned City Center Mixed Use (CCMU). The provisions of the zoning district are discussed below:

City Center Mixed Use (CCMU)

The City Center Mixed Use (CCMU) zone consists of the City-owned portion of Parcel 1A, Parcel 1B, Parcel 2, and Parcel 3A. The Zoning Ordinance states that development in the City Center Mixed Use (CCMU) zone should reflect high quality design, with integrated open space and recreational or cultural amenities, as well as opportunities for workforce housing. The City Center Mixed Use (CCMU) zoning provisions do not have any height limits. The City Center Mixed Use (CCMU) provisions allow a FAR of 0.70, which can be increased to 1.35 if affordable housing and significant public benefits or amenities such as public art and plazas, public facilities, or a transit facility is nearby or in close proximity.

4.1.5 - Methodology

MBA personnel conducted site reconnaissance, reviewed aerial and site photographs, and referenced the applicable planning documents for the project site. MBA personnel photographed the project site from multiple short-range and long-range viewpoints. Photographs include views of and from the project site. Visual simulations of the proposed project were prepared by Gates and Associates. MBA has used the above information in applying the threshold criteria cited below. The impacts and mitigation measures are also provided below.

4.1.6 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetic resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Have a substantial adverse effect on a scenic vista?
- b.) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- c.) Substantially degrade the existing visual character or quality of the site and its surroundings?
- d.) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

4.1.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Scenic Vistas

Impact AES-1: The proposed project would not have a substantial adverse effect on a scenic vista.

Impact Analysis

The City of San Ramon General Plan does not identify any scenic vistas on any of the four parcels comprising the project site. The primary scenic vistas visible from the project site and surrounding land uses are the Dougherty Hills, Wiedemann Hill, and Mt. Diablo. Impacts on views of scenic vistas resulting from the proposed project are analyzed by project component. Visual simulation of the proposed project as viewed from 11 different vantage points are provided in Exhibit 4.1-4a through Exhibit 4.1-4l.

Plaza District

The proposed project would result in the development of structures in excess of 80 feet in the Plaza District. The hotel would be approximately 91 feet above finished grade, the cinema would be slightly more than 83 feet above finished grade, and the residential uses on Blocks F-G would be slightly more than 85 feet above finished grade. The height of these structures has the potential to obstruct views of the aforementioned scenic vistas, most notably from the Iron Horse Trail and Central Park.

North of Bollinger Canyon Road, views of the hills to the west are available from the Iron Horse Trail. The existing quality of these views is high because of the lack of visual obstructions on Parcel 3A in the foreground that allow for expansive views of Wiedemann Hill and the hills to the west. The Plaza District structures would introduce foreground visual obstructions to Parcel 3A that would eliminate views of the hills to the west either partially or entirely. Exhibit 4.1-4l provides a depiction



Source: Google Earth.



Exhibit 4.1-4a View Location Key Map



View from Memorial Park before.



View from Memorial Park after.



Final view from Memorial Park key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

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Exhibit 4.1-4b View From Memorial Park

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View from Market Place before.



Final view from Market Place after.



Final view from Market Place key map.

Source: Michael Brandman Associates, 2007.



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Exhibit 4.1-4c View From Market Place

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View from Camino Ramon before.



View from Camino Ramon after.



View from Camino Ramon key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

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Exhibit 4.1-4d View From Camino Ramon

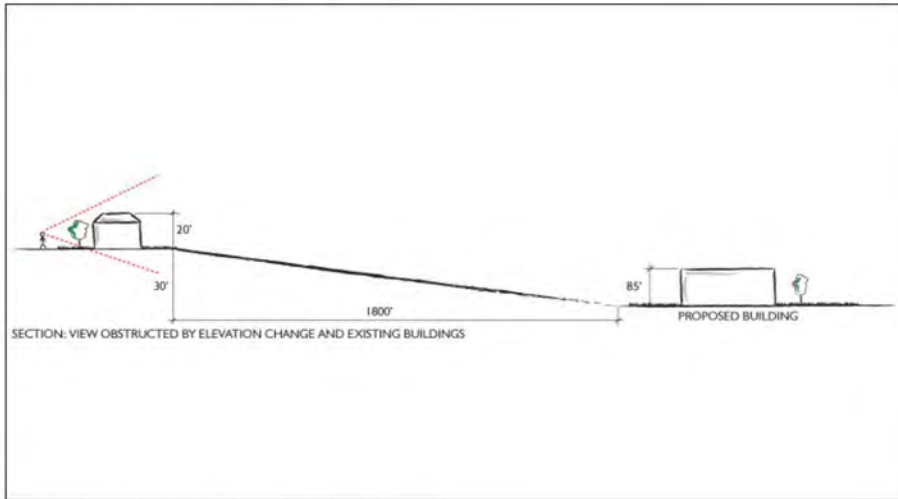
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View from Ridgeview Court before.



View from Ridgeview Court after.



Final view from Ridgeview Court section.



Final view from Ridgeview Court key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 07/2007 | 4.1-4e_view_ridgeview_court.cdr

Exhibit 4.1-4e View From Ridgeview Court

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View from Central Park before.



View from Central Park after.



Final view from Central Park key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 07/2007 | 4.1-4f_view_central_park.cdr

Exhibit 4.1-4f View From Central Park

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View from Iron Horse Trail looking north before.



View from Iron Horse Trail looking north after.



Final view from Iron Horse Trail looking north key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-4g_view_iron_horse_trail_north.cdr

Exhibit 4.1-4g View From Iron Horse Trail Looking North

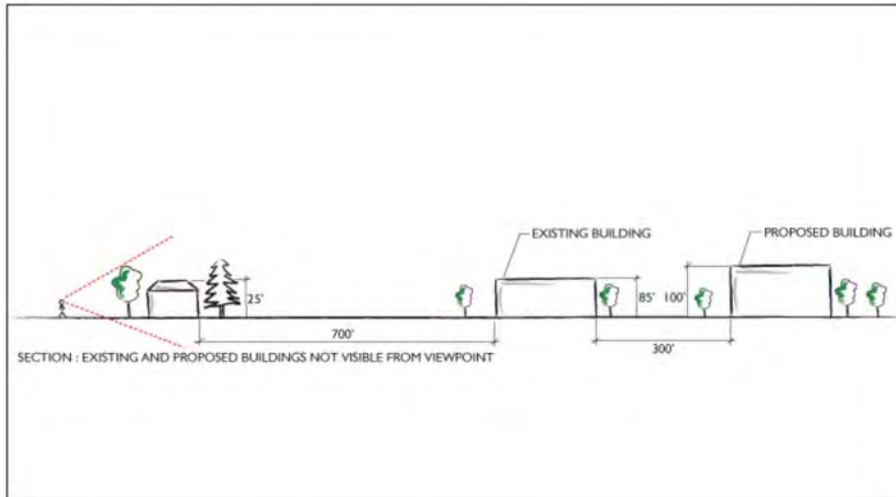
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View from Chaucer Circle before.



View from Chaucer Circle after.



Final view from Chaucer Circle section.



Final view from Chaucer Circle key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 07/2007 | 4.1-4h_view_chaucer_circle.cdr

Exhibit 4.1-4h View From Chaucer Circle

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View from Chevron Park before.



View from Chevron Park after.



Final view from Chevron Park key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-4i_view_chevron_park.cdr

Exhibit 4.1-4i View From Chevron Park

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View from Bishop Drive before.

View from Bishop Drive after.



View from Bishop Drive key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-4j_view_bishop_drive.cdr

Exhibit 4.1-4j View From Bishop Drive

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View from Bollinger Canyon Road Median before.



View from Bollinger Canyon Road Median after.



View from Bollinger Canyon Road Median key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-4k_view_bollinger_canyon_drive.cdr

Exhibit 4.1-4k View From Bollinger Canyon Road Median

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View from Iron Horse Trail looking south before.



View from Iron Horse Trail looking south after.



Final view from Iron Horse Trail looking south key map.

Source: Michael Brandman Associates, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-4|_view_iron_horse_trail_south.cdr

Exhibit 4.1-4I View From Iron Horse Trail Looking South

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of the change in views from this segment of the Iron Horse Trail. The development of the Plaza District would have a similar effect on views of these hills from the trail at the current Bishop Ranch 3 structures. The existing Bishop Ranch 3 structures mostly screen views of the hills from the Iron Horse Trail, although views are available in gaps between buildings and along internal roadways.

Views from Central Park would only be slightly affected by the proposed project. Dense vegetation along the Watson Canyon Drainage corridor currently screens most views of Parcel 3A from Central Park and, therefore, the Plaza District would mostly be obscured from view. There are gaps in the vegetation that allow for unimpeded views of Parcel 3A and the hills to the west; however, these constitute small discrete points in the park that are not typically accessed by park users and, therefore, would not be considered substantial vantage points.

Before and after views of the Plaza District from the Market Place frontage on Bollinger Canyon Road are shown in Exhibit 4.1-4c. The Plaza District structures would partially obstruct views of the hills to the west. The quality of this vantage point is low to begin with because of existing visual obstructions including landscaping, signals, street lighting, and overhead power lines. Therefore, the additional obstruction of the hills by the Plaza District structures would not be considered substantial.

Before and after views of the Dougherty Hills to the east from The Shops at Bishop Ranch frontage with Bishop Drive is shown in Exhibit 4.1-4j. As shown in this exhibit, only the upper floors of the Plaza District structures would be visible, and they would not be high enough to obstruct views of the hills.

Before and after views of the Dougherty Hills from the median of Bollinger Canyon Road are shown in Exhibit 4.1-4k, and similar views from Chevron Park are shown in Exhibit 4.1-4i. Both exhibits indicate that the Plaza District structures would be less imposing than the existing vegetation located along the Bishop Ranch 2 frontage and would allow for a slight improvement in views of the hills from both vantage points.

Before and after views from higher elevations on the east and west sides of the project site would not be affected by the development of the proposed project. Views from Memorial Park on the west side of I-680 are shown in Exhibit 4.1-4b, and views from Ridgeview Court on the east side of Alcosta Boulevard are shown in Exhibit 4.1-4e. Both exhibits show that the Plaza District structures would be either barely noticeable or not visible because of existing visual obstructions.

Bishop Ranch 1A

The three office structures contained in Bishop Ranch 1A would be approximately 110 feet above finished grade.

Before and after views of the Bishop Ranch 1A structures from the Iron Horse Trail are provided in Exhibit 4.1-4g. The Bishop Ranch 1A structures would be distinctly visible from the Iron Horse Trail and would obstruct views of the hills to the west. These structures would be set back approximately

200 feet from the trail corridor but would be closer to the trail than the existing Bishop Ranch 1 structures. The existing vegetation located along the Bishop Ranch 1 East road obstructs views to the west, and only the upper floors of Bishop Ranch 1A would be visible in most places. Views of the Dougherty Hills and Mt. Diablo would not be affected by the Bishop Ranch 1A structures.

Before and after views of the Bishop Ranch 1A structures from the Market Place frontage on Bollinger Canyon Road are shown in Exhibit 4.1-4c. The Bishop Ranch 1A structures would partially obstruct views of the hills to the west. The quality of this vantage point is initially low, because of existing visual obstructions including landscaping, signals, street lighting, and overhead power lines. Therefore, the additional obstruction of the hills by the Bishop Ranch 1A structures would not be considered substantial.

Before and after views from the Central Park frontage on Bollinger Canyon Road are presented in Exhibit 4.1-4f. The existing quality of these views is moderate to good because of the large extent of ridgelines and hillsides, although visual obstructions including signals, street lighting, landscaping, and overhead power lines diminish the quality of these views. After the development of the Bishop Ranch 1A structures, views of the hills from the Central Park frontage would be almost entirely obstructed.

Views from the intersection of Chaucer Circle and Ascot Drive are shown in Exhibit 4.1-4h. Bishop Ranch 1A would not be visible from this intersection because of existing visual obstructions.

Before and after views of the Dougherty Hills from the median of Bollinger Canyon Road are presented in Exhibit 4.1-4k, and similar views from Chevron Park are shown in Exhibit 4.1-4i. Both exhibits show that the Bishop Ranch 1A structures would be more imposing than the existing vegetation located along the Bishop Ranch 1 frontage and would add visual obstructions to views of the hills from both vantage points.

Before and after views from higher elevations on the east and west sides of the project site would not be affected by the development of the proposed project. Views from Memorial Park on the west side of I-680 are shown in Exhibit 4.1-4b, and views from Ridgeview Court on the east side of Alcosta Boulevard are presented in Exhibit 4.1-4e. Both exhibits show that the Bishop Ranch 1A structures would be either barely noticeable or not visible because of existing visual obstructions.

City Hall and Transit Center

The maximum height of City Hall would be approximately 70 feet above finished grade, which would be less than the finished grade height of the Plaza District and Bishop Ranch 1A structures, as well as the existing Bishop Ranch 1 structures. Because of its lower height, views of City Hall from the north would be screened by the Plaza District (Exhibit 4.1-4d), views from the east would be almost entirely screened by Bishop Ranch 1A and the Plaza District (Exhibits 4.1-4c and 4.1-4f), and views from the south would be screened by the existing Bishop Ranch 1 structures. City Hall would be

visible from the west, as shown in Exhibits 4.1-4i and 4.1-4k. However, the exhibits indicate that City Hall will be much less prominent than Bishop Ranch 1A and, therefore, would not have any affect on views of the Dougherty Hills. Therefore, City Hall would not affect views of any hills.

Summary of Impacts

While views of the Dougherty Hills, Wiedemann Hill, and the hills to the west would be obstructed by structures associated with the proposed project, obstruction would be primarily limited to the Iron Horse Trail and the Bollinger Canyon Road corridor. Aside from its frontage with Bollinger Canyon Road, no substantial changes in views from Central Park would occur because of the presence of the existing dense vegetation along Watson Canyon Drainage.

Other land uses, most notably the residential areas located south of Bishop Ranch 1, east of Alcosta Boulevard, and west of San Ramon Valley Boulevard, would not experience any significant changes in views of the surrounding hills or Mt. Diablo because of the development of the proposed project.

Several policies in the City of San Ramon General Plan recognize that the City Center project is unique in its size, location, and characteristics, and they allow for flexibility of architectural design, building height, massing, and scale. Policy 4.8-I-17 provides an exception for the City Center project from the 75-foot maximum building height; limitations on height limits for towers, spires, and technical features, such as elevator penthouses and mechanical equipment enclosures; maximum vertical wall dimensions without a minimum upper-story stepback or setback; and limitations on blank walls visible from public streets. In addition, the Zoning Ordinance does not establish a height limit for buildings in the City Center Mixed Use (CCMU) zone. The Plaza District and Bishop Ranch 1A structures would be located within this zoning district and, therefore, would not be subject to any height requirements. Moreover, the actual number of vantage points impacted by the proposed project is relatively small—approximately 0.5 mile of Bollinger Canyon Road and approximately 0.5 mile of the Iron Horse Trail. Nearly every other surrounding street or land use would not experience a significant loss in views of the surrounding hills.

Finally, the proposed project would create new public and private view opportunities. The east-west trending Center Street and the pedestrian plaza in the Plaza District would have view corridors of the Dougherty Hills, Wiedemann Hill, and the hills to the west. The upper floors of the Plaza District, Bishop Ranch 1A, and City Hall would have views of the surrounding hills, as well as north-south views of the San Ramon Valley. Because these views currently do not exist, this is considered a benefit of the proposed project.

For these reasons, the proposed project's impacts on scenic vistas would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

State Scenic Highways

Impact AES-2: **The project would not substantially damage scenic resources within a State scenic highway.**

Impact Analysis

I-680 is an “Officially Designated” State Scenic Highway within the limits of the City of San Ramon. The primary scenic resources within the San Ramon city limits that are visible from I-680 are the Dougherty Hills, Wiedemann Hill, and Mt. Diablo. As shown in Exhibit 4.1-3, views of the four parcels that constitute the project site are not available from I-680 because of visual obstructions, including vegetation, located in the freeway right-of-way and The Shops at Bishop Ranch property, and in the Bollinger Canyon Road interchange.

Plaza District

The Plaza District component of the proposed project would include three structures in excess of 80 feet above finished grade, with the nearest building located at a distance of approximately 1,400 feet from I-680. Because of this distance and the presence of existing visual obstructions, these structures would not be visible from the freeway. Therefore, the Plaza District structures would not alter views of the surrounding hills from I-680.

Bishop Ranch 1A and City Hall

Bishop Ranch 1A and City Hall would be located next to the existing Bishop Ranch 1 office complex, which is not visible from I-680. While Bishop Ranch 1A would contain structures in excess of 100 feet above finished grade, these structures would be the furthest project structures from I-680 and would not be visible. Therefore, these structures also would not alter views of the surrounding hills from I-680.

Summary of Impacts

The four parcels that comprise the project site are not visible from I-680. Development of the proposed project would not affect views of the hills from I-680. Therefore, the proposed project’s impacts on State scenic highways would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Visual Character

Impact AES-3: **Development of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.**

Impact Analysis

The proposed project would develop new buildings and infrastructure on approximately 44 acres of developed and undeveloped land in the Bishop Ranch Business Park. This impact assesses the proposed project's potential to substantially degrade the visual character of the project site and its surroundings. Included in this analysis is evaluation of the proposed project's architectural design and landscaping characteristics, building massing, and shade and shadow effects.

Removal of Existing Structures and Infrastructure

Existing building and infrastructure exists on Parcels 1A, 1B, and 2. Parcels 1A and 1B contain parking areas and roadways associated with Bishop Ranch 1. Parcel 2 contains the existing Bishop Ranch 2 office complex, which consists of 194,652 square feet of office space and associated parking and landscaped areas.

Development of the proposed project would result in the removal of all existing buildings and infrastructure on these three parcels. The parking areas on Parcels 1A and 1B contain surface, asphalt lots with landscaped islands. These areas do not contain any notable visual resources. Bishop Ranch 2 contains four two-story white buildings developed in the early 1980s, characterized as typical in appearance for that era. These buildings resemble other older office structures in the Bishop Ranch Business Park (e.g., Bishop Ranch 11 and Bishop Ranch 12) and do not have any unique or notable architectural elements or features. Therefore, the removal of existing buildings and infrastructure on these three parcels would not be considered a substantial degradation of existing visual quality.

Architectural Design and Landscaping

Below is a discussion of the proposed project's architectural design and landscaping features by project component. Exhibits 4.1-5a through 4.1-5c provide illustrative renderings of the proposed project's three components. Also referenced are exhibits in Section 3, Project Description, depicting building sections and landscaping.

Plaza District

The architectural design of the Plaza District structures would incorporate contemporary design elements that subtly balance scale, adjacency, and use mix to create a visually appealing destination. The Plaza District design emphasizes four themes that are intended to soften and harmonize the different uses together:

- Feature building exteriors that maximize distinctive, substantial, and forward-thinking materials to create a clean, contemporary, yet sustainable architecture
- Maximize the use of glass to emphasize a sense of clarity and transparency, incorporate views of the surrounding hills into building design, and increase natural day lighting of interior spaces
- Bring the dynamic movement of water into the design of important public spaces to activate the site as well as engage and attract pedestrians, creating great settings for public gatherings
- Promote a tranquil environment with stately landscaped streets and sidewalks; shade active sidewalks with dappled light of closely-spaced street trees paired with varied planting

All Plaza District structures would be multi-storied, ranging from approximately 40 feet to approximately 91 feet above grade. Most of the building massing for structures in the Plaza District would be no more than 72 feet above grade, although certain uses including the hotel, cinema, and residential uses in Blocks G and H would have features that exceed 75 feet. The pedestrian plaza portion of the Plaza District would include a water feature, decorative paving, street trees and landscaping intended to create a vibrant pedestrian-oriented environment.

The building sections of the Plaza District are shown in Exhibit 3-8a and Exhibit 3-8b. The conceptual landscaping plan for the Plaza District is shown in Exhibit 3-9.

Bishop Ranch 1A

The architectural design of the office buildings would employ a curved façade and prominently feature the use of white building colors and glass, similar to the appearance of the nearby Bishop Ranch 1 office structures. The maximum height of the office buildings would be approximately 110 feet above grade. The architectural design of Bishop Ranch 1A is shown in Exhibit 3-11. Landscaping would be provided throughout the office complex and is conceptually shown in Exhibit 3-12.

City Hall and Transit Center

The City Hall would feature a four-story City office building with an attached dome-shaped Council Chambers. A cast sculpting of the City symbol—an aloft crow with extended wings—would crown the top of the dome housing the Council Chambers. A tiered water fountain also would be incorporated into the exterior design of the Council Chambers, and a public plaza would be located in front of the entrance to City Hall. The height of City Hall would be approximately 70 feet. The architectural design of City Hall is shown in Exhibit 3-14. Landscaping would be provided throughout the City Hall complex and is conceptually shown in Exhibit 3-15.



Looking East over the Plaza



Looking East along Center Street



Seasonal Plaza View



San Ramon City Center Looking West to the Bay



The Courtyard at City Hall

Source: Sunset Development Company, April 30, 2007.



Michael Brandman Associates

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Exhibit 4.1-5a
Plaza District Illustrative Renderings

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VIEW OF BR 1A COURTYARD



VIEW OF BR 1A LOOKING SOUTHWEST FROM BOLLINGER CANYON ROAD

Source: Sunset Development Company, April 30, 2007.

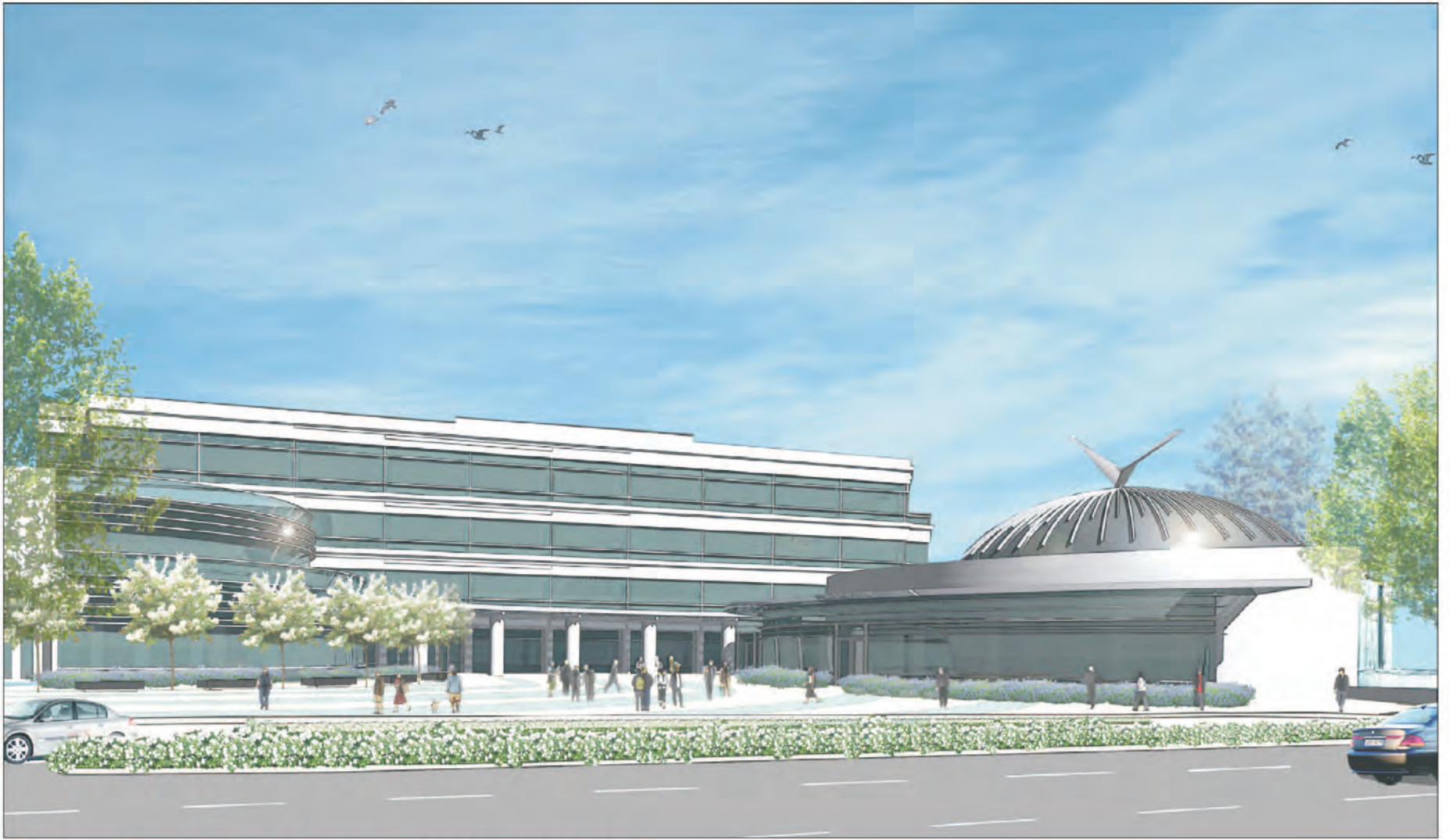


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24910007 • 06/2007 | 4.1-5b_bishop_ranch1A_renderings.cdr

Exhibit 4.1-5b
Bishop Ranch 1A Illustrative Renderings

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VIEW LOOKING SOUTHWEST FROM BOLLINGER CANYON ROAD



VIEW LOOKING NORTHWEST INTO PLAZA

Source: Sunset Development Company, April 30, 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.1-5c_city_hall_renderings.cdr

Exhibit 4.1-5c City Hall Illustrative Renderings

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The Transit Center would be incorporated into the ground floor of the two-level, 414-space parking garage that would be located on the south side of the City Hall. The Transit Center would provide four bus stalls and a waiting area for passengers. The maximum height of the Transit Center would be approximately 28 feet above grade.

Building Massing

The proposed project would result in the development of several multi-story buildings in excess of 80 feet on approximately 44 acres (includes roadways and in the Bishop Ranch Business Park. Three structures developed in Bishop Ranch 1A would be in excess of 100 feet above finished grade. Exhibit 4.1-6 provides a perspective of the proposed project's building massing.

Floor Area Ratio (FAR) provides a measurement of building massing and is calculated by divided project square footage (2,168,466) by the square feet of developable land area (1,702,760). The entire City Center project would have a 1.27 FAR, which is within the maximum allowable 1.35 FAR established in the Zoning Ordinance for the City Center Mixed Use (CCMU) zone.

Building massing is evaluated by project component below.

Plaza District

As shown in the exhibit, the Plaza District structures would introduce new building masses to Parcels 2 and 3A. Multi-story structures would occupy each of the seven Plaza District blocks and range in height from approximately 35 feet to 91 feet. Nearly all of the blocks would have solid massing from finished grade to approximately 40 feet above finished grade, with smaller features such as towers extending further upward. Some blocks would have solid massing to heights of 70 feet above finished grade. Generally, most blocks would have solid massing between approximately 40 and 62 feet above finished grade.

Bishop Ranch 1A

Bishop Ranch 1A would have the most prominent building massing of any of the proposed project's components. Solid massing would extend to approximately 110 feet above finished grade for all three office buildings. Both the Bishop Ranch 1A and Bishop Ranch 1 parking structures would have solid massing extending to approximately 42 feet above finished grade.

City Hall and Transit Center

The City Hall would have solid building massing extending to approximately 61 feet above finished grade. The Transit Center would have solid building massing extending to approximately 28 feet above finished grade.

Shade and Shadow

Exhibits 4.1-7a through 4.1-7d provide simulations of the proposed project's shade and shadow during the summer and winter solstices. Because it is located east of the project site, the Iron Horse Trail would not receive any shadow from the proposed project's structures during the morning hours

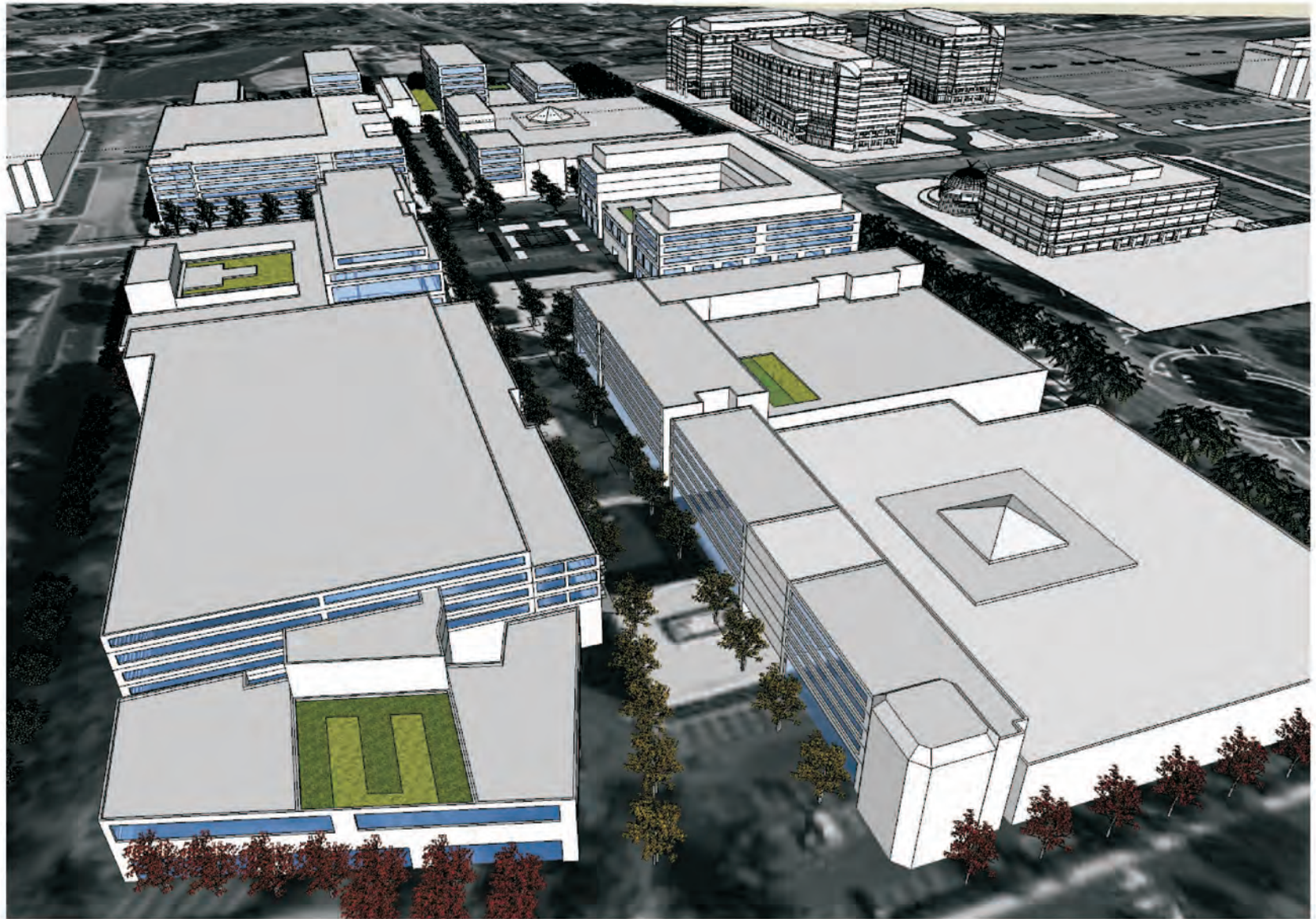
at any time during the year, or during the early afternoon hours in the spring and summer months. During the early afternoon hours in the fall and winter months, Plaza District Blocks F and G and Bishop Ranch 1A structures would cast shadows onto the trail. As shown in Exhibit 4.1-7d, shadow from Plaza District Blocks F and G and Bishop Ranch 1A would extend onto the Iron Horse Trail at 2 p.m. on the Winter Solstice, which is the worst-case scenario for early afternoon shadow impacts.

General Plan Policy 4.8-I-17 requires that “large-scale office development” provide sun access planes adjacent to public parks (which includes Central Park) at a ratio of at least 3.5 feet of horizontal distance per 1 foot of building height above finished grade. General Plan Figures 4-5, 4-6, and 4-7 depict sun access plan requirements for structures near public parks, including Central Park. At 3 p.m. on the Winter Solstice, the sun’s angle would be approximately 15.5°, azimuth W 42°. Using a building height of 86 feet, the structures on Blocks F and G would need to be set back a minimum distance of 155 feet from the Central Park boundary. As currently shown on the project plans, the structures on Blocks F and G would be set back 172 feet from the park and, therefore, would be consistent with the sun access plane requirement of the General Plan.

Summary of Impacts

The proposed project would irreversibly change the visual character of the project site. Existing buildings and infrastructure, as well as landscaping, would be removed, and a number of new, multi-story structures would be developed on all four parcels. Currently, the tallest buildings in the City are the Bishop Ranch 8 office structures, which stand approximately 87 feet above grade. Five City Center buildings would exceed 87 feet above grade: the residential structure on Blocks F and G at approximately 89 feet, the hotel at approximately 91 feet, and the three Bishop Ranch 1A office structures at approximately 110 feet. The General Plan explicitly exempts City Center buildings from height restrictions, and the total project FAR is 1.27, within the FAR of 1.35 established by the Zoning Ordinance. In addition, the proposed project’s structures would be consistent with the sun access plane requirements of the General Plan. Therefore, it is reasonable to conclude the height, massing, and shade and shadow effects of the proposed project’s structures are consistent with the visual character envisioned by the City’s land use policy documents.

More broadly, the General Plan envisions the City Center as a cultural, entertainment, and commercial destination for local residents, and the policy language recognizes the need for providing design requirement flexibility for the project. Significant flexibility is given to building height, FAR, and intensity of uses, indicating that City decision makers and the San Ramon electorate who approved the General Plan in March 2002 were aware that the City Center project would be unique in its nature, scope, and scale. For this reason, it is reasonable to conclude that, while the City Center would dramatically and irreversibly alter the visual character of the project site and the surrounding area, the General Plan—and by extension City decision makers and the San Ramon electorate—have identified this change as City policy. Therefore, the proposed project’s aesthetic characteristics would be consistent with established City policy and the long-term vision of the community visual character.



Source:

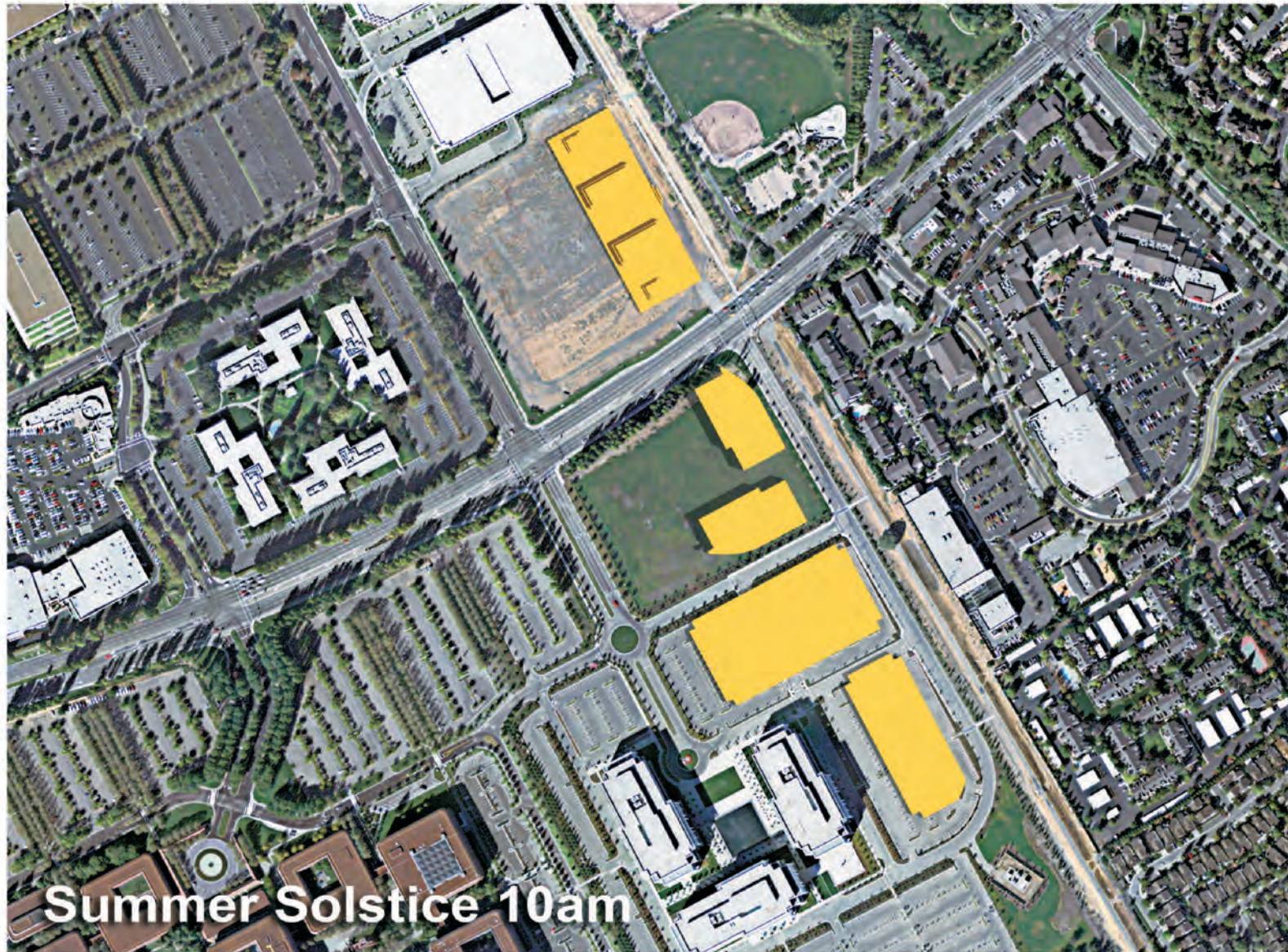


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Exhibit 4.1-6 Project Perspective

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Source:

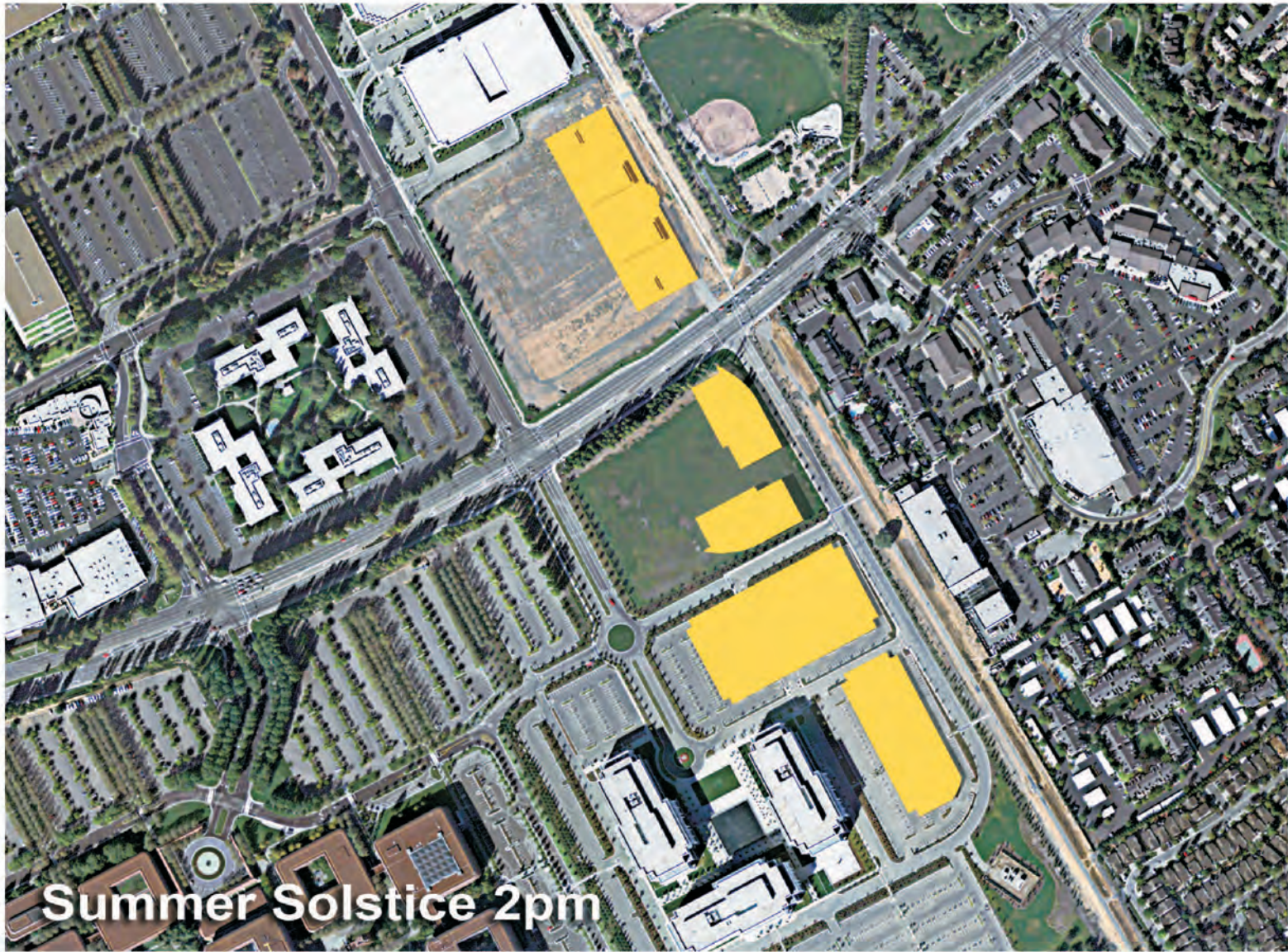


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24910007 • 06/2007 | 4.1-7a_summer_sols10am.cdr

Exhibit 4.1-7a
Shade and Shadow - Summer Solstice 10 a.m.

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Summer Solstice 2pm

Source:

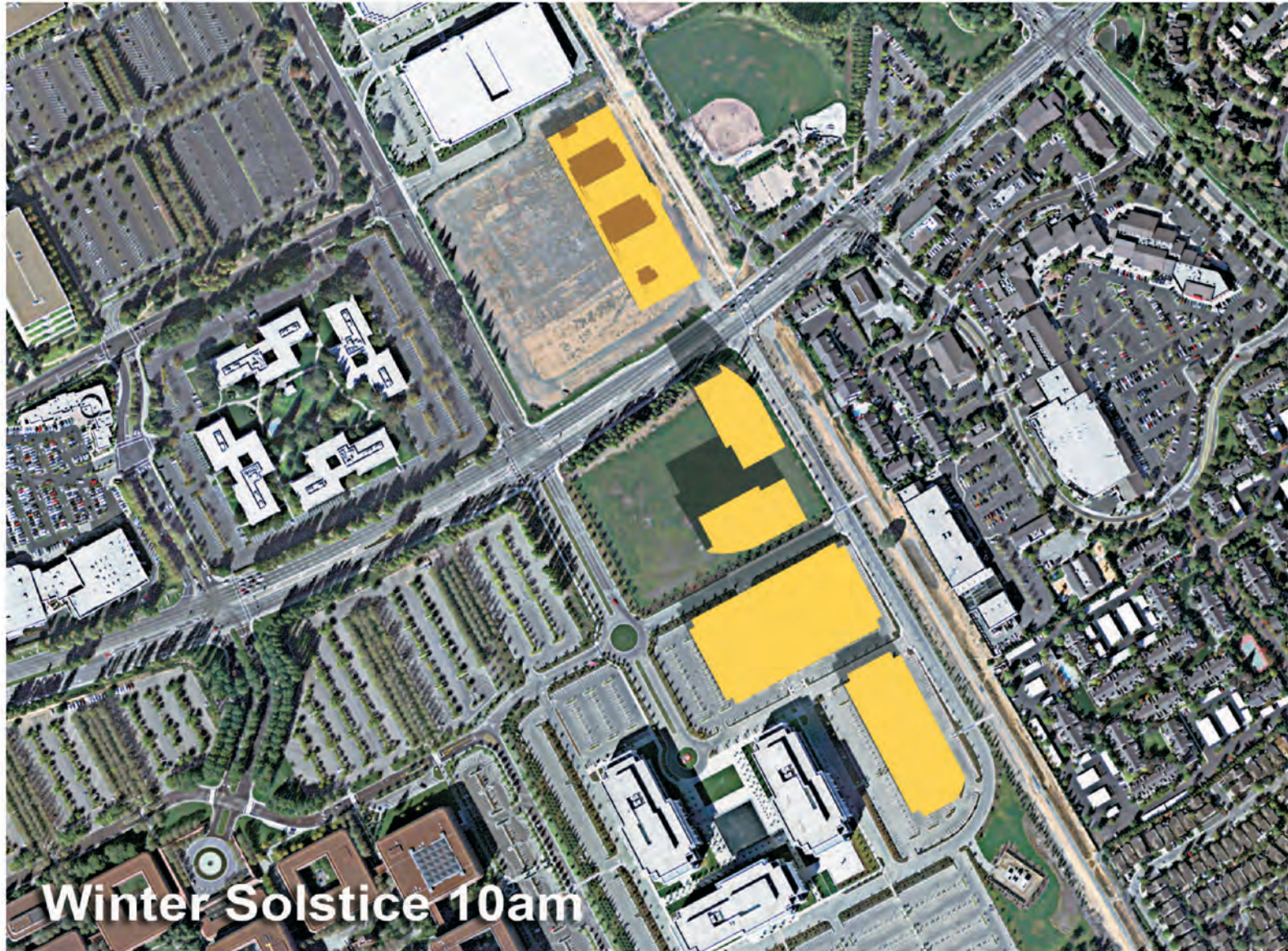


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Exhibit 4.1-7b
Shade and Shadow - Summer Solstice 2 p.m.

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Winter Solstice 10am

Source:

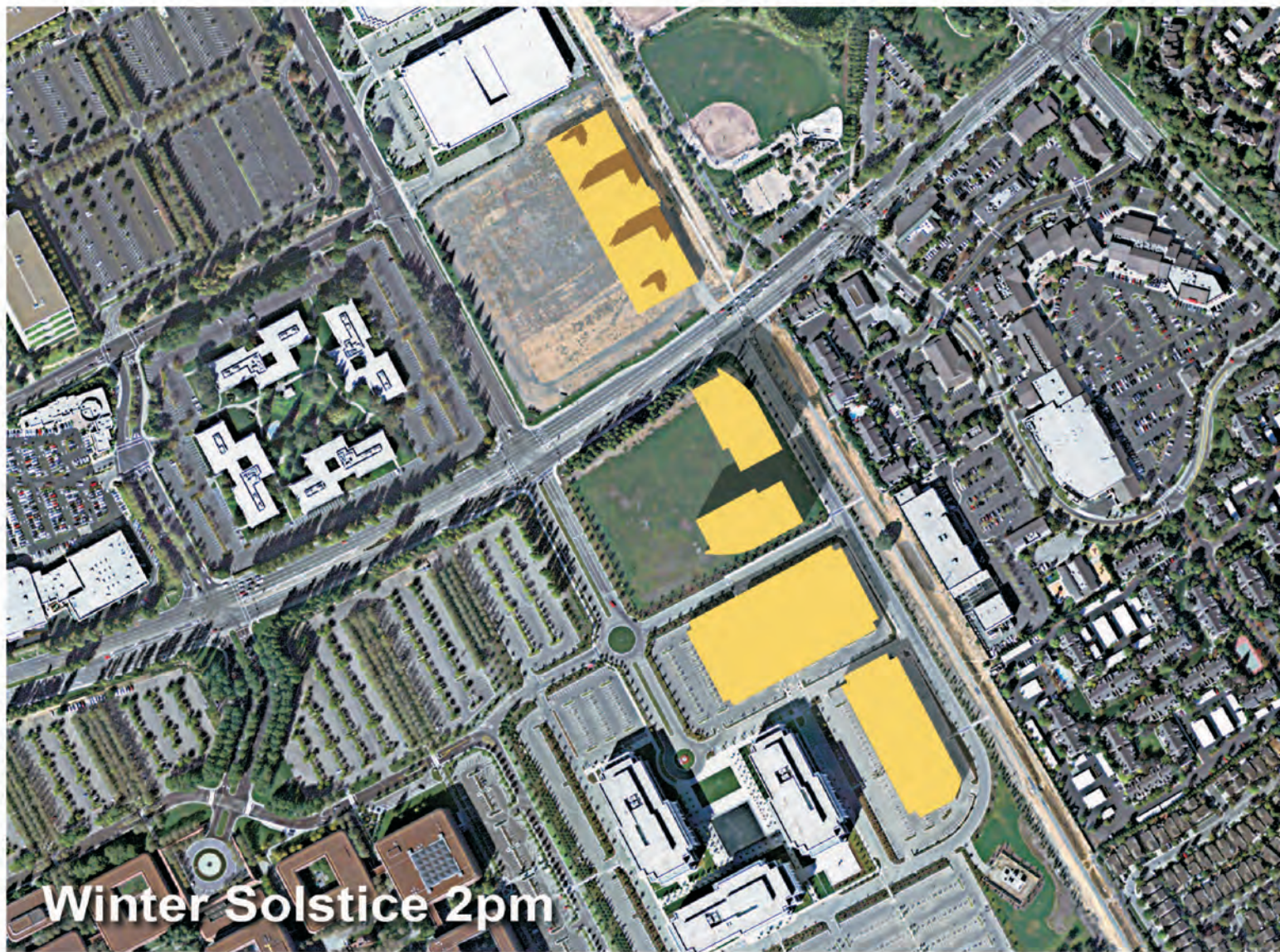


Michael Brandman Associates

24910007 • 06/2007 | 4.1-7c_winter_sols10am.cdr

Exhibit 4.1-7c
Shade and Shadow - Winter Solstice 10 a.m.

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Source:



Michael Brandman Associates

24910007 • 06/2007 | 4.1-7d_winter_sols2pm.cdr

Exhibit 4.1-7d
Shade and Shadow - Winter Solstice 2 p.m.

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DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Impacts on visual character would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Light and Glare

Impact AES-4: **The proposed project would create new sources of substantial light or glare that may adversely affect day or nighttime views.**

Impact Analysis

The proposed project would develop and redevelop a total of approximately 2.1 million square feet of mixed uses (approximately 1.6 million net square feet above existing vested entitlement and approximately 1.9 million square feet of net additional construction above existing site conditions). All of the proposed project's commercial, residential, and civic structures would be multi-storied, have large glass windows, and would be equipped with exterior lighting. This impact assesses the proposed project's light and glare impacts. Each topic is discussed separately.

Light

New sources of light would be emitted from exterior building lighting, street lighting, parking structure lighting, illuminated signs, and vehicular headlights. Lighting associated with each project component is discussed below.

Plaza District

The Plaza District is intended to be a vibrant cultural, entertainment, and retail destination that would operate from the morning through the late evening. Reflecting the expected duration and intensity of use, the Plaza District would be well lit with exterior lighting along streets and buildings and in parking structures to provide for a safe and secure environment. Decorative lighting and illuminated signs would be located along roadways and pedestrian areas. Interior lighting would also be visible, particularly on the upper floors.

Parcel 2 currently contains Bishop Ranch 2, which emits existing sources of light from exterior building lighting and parking lot lighting. However, the Plaza District would have more intensive uses than Bishop Ranch 2 and, therefore, would result in a substantial increase in illumination onsite. Potential receivers of light spillage include The Shops at Bishop Ranch, the AT&T campus, Bishop Ranch 3, the Iron Horse Trail, and Central Park. Mitigation is proposed that would require the project applicant to submit a photometric plan to the City, identifying measures to shield lighting and prevent spillage onto neighboring land uses.

Bishop Ranch 1A

Bishop Ranch 1A would contain three seven-story office structures similar in nature to the nearby Bishop Ranch 1 office structures. Exterior lighting would be located around the building, along pathways and roadways, and in the two parking structures. This lighting would be similar to exterior lighting currently located around the Bishop Ranch 1 structures. Nonetheless, the mitigation measure would apply to this component.

A photometric plan for Bishop Ranch 1A, City Hall, and the Transit Center is provided in Exhibit 4.1-8.

City Hall and Transit Center

City Hall would consist of a four-story structure, and the Transit Center would be located in a two-story parking structure. The City Hall would be similar in nature to Bishop Ranch 1A but substantially smaller. Exterior lighting associated with City Hall would be located around the building, along pathways and roadways, and in the Transit Center parking structure. Similar to Bishop Ranch 1A, exterior lighting associated with City Hall would be similar to the existing lighting associated with Bishop Ranch 1. Nonetheless, the mitigation measure would apply to this component.

Glare

Consistent with the appearance of the other multi-story structures in the Bishop Ranch Business Park, all of the proposed project's prominent multi-story structures would have large glass windows that have the potential for glare. However, glare from existing structures in the Bishop Ranch Business Park (e.g., Bishop Ranch 1 and Bishop Ranch 3) is not noticeable on even the brightest days because the exterior glass is treated to reduce reflection. The proposed project's commercial, residential, and civic structures would employ the use of similarly treated glass, and it is expected that glare from glass windows would not be substantial enough to adversely affect views.

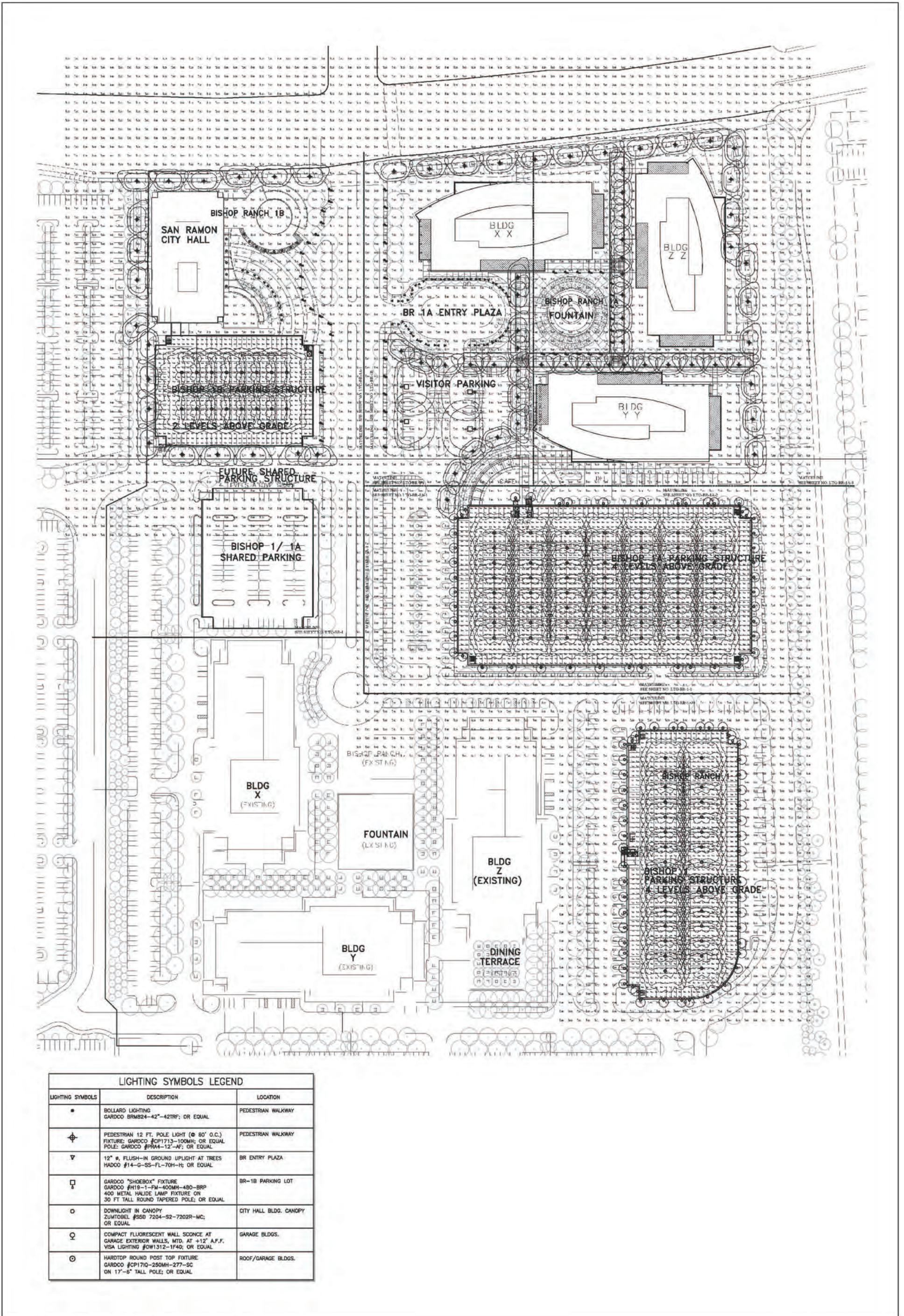
Summary of Impacts

Because of the scale and intensity of the proposed project, lighting impacts associated with the project have the potential to be significant, and mitigation is proposed that would require the applicant to submit a lighting plan identifying light shielding techniques to minimize unwanted spillage to the extent feasible. With the implementation of mitigation, potentially significant impacts associated with unwanted light spillage onto neighboring land uses would be reduced to a level of less than significant.

The proposed project is not expected to have substantial glare impacts because of the limited potential for noticeable glare from glass windows.

Level of Significance Before Mitigation

Potentially significant impact.



Source: Rosendin Electric Lighting Design, April 2007.



Michael Brandman Associates

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Exhibit 4.1-8 Photometric Plan

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
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Mitigation Measures

MM AES-4 Prior to issuance of building permits, the applicant shall submit a site lighting plan to City of San Ramon for review and approval. The plan shall identify necessary requirements established in the Zoning Ordinance (D3-7 and D3-33) and must provide detailed information regarding lighting levels by the use of photometrics to indicate the maximum, minimum, and average footcandle lighting level proposed for this project. The plan shall also identify the type of light fixtures and pole height.

Level of Significance After Mitigation

Less than significant impact.

4.2 - Air Quality

4.2.1 - Introduction

This section describes the existing air quality setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the San Ramon City Center Air Quality Analysis Report, prepared in June 2007 by Michael Brandman Associates, included in this EIR as Appendix B.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that it would have a significant unavoidable impact on air quality because planned growth would exceed the projections contained in the Bay Area Air Quality Management District Clean Air Plan in Section 4.7 of the document. The City Council adopted a Statement of Overriding Considerations for the significant unavoidable impact. All other air quality impacts were found to be less than significant after the implementation of mitigation. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all air quality impacts were less than significant after mitigation in Section 4.3 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.2.2 - Environmental Setting

San Francisco Bay Area Air Basin

San Ramon is located within the San Francisco Bay Area Air Basin, which comprises all or portions of the nine Bay Area counties. Air quality in the Air Basin is regulated by the United States Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD). The regulatory responsibilities of these agencies are discussed in the Regulatory Framework section.

Regional and local air quality is impacted by dominant airflows, topography, atmospheric inversions, location, season, and time of day. These characteristics are discussed in relation to the Air Basin.

Large Scale Influences

A semi-permanent, high-pressure area centered over the northeastern Pacific Ocean dominates the summer climate of the West Coast. Because this high-pressure cell is quite persistent, storms rarely affect the California coast during the summer. Thus, the conditions that persist along the coast of California during summer are a northwest airflow and negligible precipitation. A thermal low-pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the San Francisco Bay Area much of the summer.

The steady northwesterly flow around the eastern edge of the Pacific high-pressure cell exerts stress on the ocean surface along the west coast. This induces upwelling of cold water from below. Upwelling produces a band of cold water off San Francisco that is approximately 80 miles wide. During July, the surface waters off San Francisco are 3 degrees Fahrenheit (°F) cooler than those off Vancouver, British Columbia, more than 900 miles to the north. Air approaching the California coast, already cool and moisture-laden from its long trajectory over the Pacific, is further cooled as it flows across this cold bank of water near the coast, thus accentuating the temperature contrast across the coastline. This cooling is often sufficient to produce condensation—a high incidence of fog and stratus clouds along the Northern California coast in summer.

In winter, the Pacific High weakens and shifts southward, upwelling ceases, and winter storms become frequent. Almost all of the Bay Area's annual precipitation takes place in the November through April period. During the winter rainy periods, inversions are weak or nonexistent, winds are often moderate, and air pollution potential is very low. During some periods in winter, when the Pacific high becomes dominant, inversions become strong and often are surface-based; winds are light, and pollution potential is high. These periods are characterized by winds that flow out of the Central Valley into the Bay Area.

Topography

The San Francisco Bay Area is characterized by complex terrain consisting of coastal mountain ranges, inland valleys, and bays. Elevations of 1,500 feet are common in the higher terrain of this area. Normal wind flow over the area is distorted in the lowest levels. This is particularly true when the air mass is stable and the wind velocity is not strong. With stronger winds and unstable air masses moving over the area, this distortion is reduced. The distortion is greatest when low-level inversions are present, with the surface air beneath the inversion flowing independently of the air above the inversion. This latter condition is very common in the summer, the surface air mass being the sea breeze.

Winds

In summer, the northwest winds to the west of the Pacific coastline are drawn into the interior through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately to the south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more nearly from the west as they stream through the Golden Gate. This channeling of the flow through the

Golden Gate produces a jet that sweeps eastward but widens downstream, producing southwest winds at Berkeley and northwest winds at San Jose; a branch curves eastward through the Carquinez Straits and into the Central Valley. Wind speeds may be locally strong in regions where air is channeled through a narrow opening such as the Carquinez Strait, the Golden Gate, or San Bruno Gap. For example, the average wind speed at San Francisco International Airport from 3 a.m. to 4 p.m. in July is about 20 miles per hour (mph), compared with only about 8 mph at San Jose and less than 7 mph at the Farallon Islands.

The sea breeze between the coast and the Central Valley commences near the surface along the coast in late morning or early afternoon; it may first be observed only through the Golden Gate. Later in the day, the layer deepens and intensifies while spreading inland. As the breeze intensifies and deepens, it flows over the lower hills farther south along the peninsula. This process frequently can be observed as a bank of stratus clouds “rolling over” the coastal hills on the west side of the bay. The depth of the sea breeze depends in large part upon the height and strength of the inversion. The generally low elevation of this stable layer of air prevents marine air from flowing over the coastal hills. It is unusual for the summer sea breeze to flow over terrain exceeding 2,000 feet in elevation.

In winter, the Bay Area experiences periods of storminess, moderate-to-strong winds, and periods of stagnation with very light winds. Winter stagnation episodes are characterized by outflow from the Central Valley, nighttime drainage flows in coastal valleys, weak onshore flows in the afternoon, and otherwise light and variable winds.

Temperature

In summer, the distribution of temperature near the surface over the Bay Area is determined in large part by the effect of differential heating between land and water surfaces. This process produces a large-scale gradient between the coast and the Central Valley, as well as small-scale, local gradients along the shorelines of the ocean and bays. The temperature contrast between coastal ocean water and land surfaces 15 to 20 miles inland reaches 35°F or more on many summer afternoons. At night, this contrast usually decreases to less than 10°F.

The winter mean temperature maxima and minima reverse the summer relationship in that daytime variations are small while mean minimum (nighttime) temperatures show large differences and strong gradients. The moderating effect of the ocean influences warmer minimums along the coast and penetrating the Bay. Coldest temperatures are in the sheltered valleys, implying strong radiation inversions and very limited vertical diffusion. An anomaly of warmer temperatures in the Santa Clara Valley is clearly an urban “heat island” effect, most pronounced on winter nights. Such heat islands are proportional to structure density and also appear over San Francisco and Oakland.

Inversions

A primary factor in air quality is the mixing depth (i.e., the vertical dimension available for dilution of contaminant sources near the ground). Over the Bay Area, the frequent occurrence of temperature

inversions limits mixing depth and, consequently, limits the availability of air for dilution. A temperature inversion may be described as a layer of warmer air over cooler air.

On most days, higher altitudes mean lower air temperatures. This is caused by most of the sun's energy being converted to sensible heat at the ground, which, in turn, warms the air at the surface. The warm air rises in the atmosphere, where it expands and cools. Sometimes, however, the temperature of air actually increases with height. This condition is known as temperature inversion, because the temperature profile of the atmosphere is "inverted" from its usual state. There are two major types of temperature inversion: "surface inversions," which occur near the Earth's surface, and "aloft inversions," which occur higher above the ground than surface inversions. Surface inversions are most important in the study of air quality.

For the most part, surface inversion patterns correlate with seasonality. The strong inversions typical of summer are formed by subsidence, the heating of downward-moving air in the high-pressure anticyclone over the western Pacific. The surface inversions typical of winter are formed by radiation as air is cooled in contact with the earth's cold surface at night. While these seasonal correlations are most prevalent, both inversion mechanisms may operate at any time of the year. At times, surface inversions formed by radiational cooling may reinforce the subsidence inversion aloft, particularly in fall and winter. The thick, strong inversion resulting in this case is especially effective in trapping pollutants.

The vertical temperature structure over the Bay Area is taken by the National Weather Service (NWS) twice daily, at 4 a.m. and 4 p.m., at Oakland International Airport. NWS reports that the inversion types found vary widely in seasonal patterns and over a 24-hour period. Localized inversion variations resulting from the numerous terrain types within the Bay Area have also been observed.

In the morning, the seasonal variations are most dramatic. From June through September there are only two days per year, on average, with no inversion below 5,000 feet. March and April have fewer morning inversions. The occurrence of surface inversions is highest from October through January, when the characteristic radiation inversion predominates. A wide cluster of occurrences between 500 to 2,500 feet dominates from May through September, when the summer subsidence inversion over the marine layer dominates. There is substantial day-to-day variability in the depth of the marine layer.

The afternoon data shows two striking and significant differences from the morning data. First, the frequent disappearance of the surface radiation inversion dominates the winter nights. During these months, a surface inversion observed in the morning persists through the afternoon less than 20 percent of the time. However, a corresponding afternoon increase may be noted in the cases from 500 to 2,500 feet. Thus, the inversion is frequently raised and perhaps weakened, but not destroyed. Second, the afternoon lowering of the marine inversion dominates the summer months. In July and

August, the afternoon inversions are frequently in the 500- to 1,000-foot interval, compared with the 1,000- to 1,500-foot interval in the morning.

Precipitation

Moderately wet winters and dry summers characterize the San Francisco Bay Area climate. Winter rains (December through March) account for about 75 percent of the average annual rainfall; about 90 percent of the annual total rainfall is received in the November-April period; and between June 15 and September 22, normal rainfall is typically less than 0.1 inch.

Annual precipitation amounts show great differences in short distances. Annual totals exceed 40 inches in the mountains and less than 15 inches in the sheltered or “shadowed” valleys. The frequency of winter rain is more uniform, however, with 10 days per month (December through March) being typical.

During rainy periods, ventilation and vertical mixing are usually high, and, consequently, pollution levels are low. However, there are frequent winter dry periods lasting over a week. It is during some of these periods that carbon monoxide and particulate pollution episodes develop.

Climate in the Diablo and San Ramon Valleys

In the Bay Area, the California Coast Range splits into a western and eastern range, with the San Francisco Bay between the two ranges. East of the eastern Coast Range lies the Diablo and San Ramon valleys, which trend from northwest to southeast. The northern portion is known as Diablo Valley and the southern portion as San Ramon Valley. The east side of the valleys is bordered by the Black Diamond Hills and Mount Diablo.

The Diablo Valley is a broad valley, approximately 5 miles wide and 10 miles long. The Carquinez Strait is at its north end; in the south, it tapers into the San Ramon Valley. Cities in the Diablo Valley include Concord and Walnut Creek. Martinez at the north end is better characterized by the Carquinez Strait region.

San Ramon Valley continues south from the Diablo Valley, extending from Alamo to Dublin. The valley is long and narrow, approximately 12 miles long and 1 mile wide. At its southern end, it opens to the Amador Valley. San Ramon and Danville are the largest communities in the San Ramon Valley.

The Coast Range on the west side of these valleys is 1,500 to 2,000 feet high. This is sufficiently high to block much of the marine air from reaching the valleys. During the daytime, there are two, weakly, predominant flow patterns: up-valley flow and westerly flow across the lower elevations of the Coast Range. On clear nights, a surface inversion sets up and separates the surface flow from the upper layer flow. When this happens, the terrain channels the flow down-valley toward the Carquinez Straits. This down-valley drainage pattern can be observed all the way to Martinez at the end of the valley.

Wind speeds in these valleys rank as some of the lowest in the Bay Area. Average annual wind speeds are 4.7 mph in Concord in the Diablo Valley and 5 mph in Danville in the San Ramon Valley. However, winds can pick up in the afternoon in San Ramon because of airflow through the Crow Canyon gap. Through this gap, air pollution from areas to the west is able to travel into the San Ramon Valley during the summer months.

Air temperatures are cooler in the winter and warmer in the summer because these valleys are further from the moderating effect of large water bodies, and because the Coast Range blocks marine air flow. In the Diablo Valley during the winter, Concord records daily maximum temperatures in the mid-50s. During the summer, average daily maximum temperatures are in the high 80s to 90 °F. Average minimum temperatures in winter are in the low to mid-40s. Temperatures in the San Ramon Valley would be similar to temperatures in Concord.

These valleys rarely experience fog during the summer. In the winter, however, tule fogs are common at night. This phenomenon is named after the tule grass wetlands (*tulares*) of the Central Valley. Tule fogs form on cold, clear nights when winds are light and there is abundant moisture on the ground, as happens after a rainstorm. Alternatively, the tule fog can be advected from the Central Valley through the Carquinez Strait and Livermore Valleys. These fogs usually burn off during the day, but occasionally can last for a week or two before being dissipated by the next storm.

Shielded by the Coast Range to the west, rainfall amounts in the Diablo Valley are relatively low. For example, Martinez in the north reports an annual average of 18.5 inches, while Walnut Creek reports 19 inches. Rainfall in the San Ramon Valley is expected to be similar because of the similar orientation of the terrain.

Pollutants

Pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and State ambient air quality standards is provided in the Regulatory Framework section.

For reasons described below, the criteria pollutants of greatest concern for the proposed project are ozone (O₃), inhalable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and carbon monoxide (CO). Other pollutants of concern are toxic air contaminants and asbestos.

Ozone

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include reactive organic gases (ROG) and oxides of nitrogen

(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, and often the effects of the emitted ROG and NO_x is felt a distance downwind of the emission sources. Ozone is subsequently 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.

Ozone can irritate lung airways and cause inflammation much like a sunburn. Other symptoms include wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities. People with respiratory problems are most vulnerable, but even healthy people who are active outdoors can be affected when ozone levels are high. Chronic ozone exposure can induce morphological (tissue) changes throughout the respiratory tract, particularly at the junction of the conducting airways and the gas exchange zone in the deep lung. Anyone who spends time outdoors in the summer is at risk, particularly children and other people who are active outdoors. Even at very low levels, ground-level ozone triggers a variety of health problems, including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses such as pneumonia and bronchitis.

Ozone also damages vegetation and ecosystems. It leads to reduced agricultural crop and commercial forest yields; reduced growth and survivability of tree seedlings; and increased susceptibility to diseases, pests, and other stresses such as harsh weather. In the United States alone, ozone is responsible for an estimated \$500 million in reduced crop production each year. Ozone also damages the foliage of trees and other plants, affecting the landscape of cities, national parks and forests, and recreation areas. In addition, ozone causes damage to buildings, rubber, and some plastics.

Ozone is a regional pollutant, as the reactions forming it take place over time, and downwind from the sources of the emissions. As a photochemical pollutant, ozone is formed only during daylight hours under appropriate conditions, but it is destroyed throughout the day and night. Thus, ozone concentrations vary depending upon both the time of day and the location. Even in pristine areas, some ambient ozone forms from natural emissions that are not controllable. This is termed background ozone. The average background ozone concentrations near sea level are in the range of 0.015 to 0.035 parts per million (ppm), with a maximum of about 0.04 ppm.

A federal standard for ozone had been set for a 1-hour averaging time of 0.12 ppm but was officially revoked in June 2005.

Reactive Organic Gases

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, that participates in atmospheric photochemical reactions. ROG consist of nonmethane hydrocarbons and oxygenated hydrocarbons. Hydrocarbons are organic compounds that contain only hydrogen and

carbon atoms. Nonmethane hydrocarbons are hydrocarbons that do not contain the unreactive hydrocarbon, methane. Oxygenated hydrocarbons are hydrocarbons with oxygenated functional groups attached.

It should be noted that there is no State or national ambient air quality standard for ROG because the gases 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 and lower visibility.

Nitrogen Oxides

During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides or NO_x. This occurs primarily in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Whereas one form of NO_x, nitrogen dioxide (NO₂) is a criteria pollutant, NO₂ by itself is not a pollutant of concern in the Basin. Of concern is the property of NO_x as an ozone precursor, which means that when it is emitted into the atmosphere, it helps form or cause ozone to be formed. When NO_x and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. NO_x can also be a precursor to PM₁₀ and PM_{2.5}.

Because NO_x and ROG are ozone precursors, the health effects associated with ozone (as discussed above) are also indirect health effects associated with significant levels of NO_x and ROG emissions.

Particulate Matter (PM₁₀ and PM_{2.5})

Particle matter (PM) 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. Others are so small, they can only be detected using an electron microscope.

Particle pollution includes inhalable coarse particles, with diameters larger than 2.5 micrometers and smaller than 10 micrometers and fine particles, with diameters that are 2.5 micrometers and smaller. For reference, PM_{2.5} is approximately one-thirtieth the size of the average human hair.

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 between such chemicals as sulfur dioxides (SO_x) and nitrogen oxides, which are emitted from power plants, industries, and automobiles. These particles, known as secondary particles, make up most of the fine particulate pollution in the country.

Particle exposure can lead to a variety of health effects. For example, numerous studies link particle levels to increased hospital admissions and emergency room visits—and even to death from heart or lung diseases. Both long- and short-term particle exposures have been linked to health problems. Long-term exposures, such as those experienced by people living for many years in areas with high

particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis and even premature death. Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks and acute bronchitis, and may increase susceptibility to respiratory infections. In people with heart disease, short-term exposure has been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported to suffer serious effects from short-term exposures, although they may experience temporary minor irritation when particle levels are elevated.

In 2005, BAAQMD released a Staff Report that identified sources of particulate matter in the Bay Area. Based on 2000–2003 ambient air monitoring data, BAAQMD and CARB estimated that the PM_{2.5} fraction of total particulate matter accounted for approximately 60 percent of PM₁₀ during the winter and approximately 45 percent during the rest of the year. On days when the PM standards are exceeded, PM_{2.5} can account for as much as 90 percent of PM₁₀. On an annual basis, CARB estimated that PM_{2.5} comprised approximately 50 percent of the PM₁₀ levels.

Based on the inventory data, BAAQMD has determined that combustion activities such as residential wood burning, construction/demolition activities, road dust, and emissions from on- and off-road engines were identified as significant sources of PM₁₀ emissions in the Bay Area. However, while the inventory was helpful in determining potential PM₁₀ sources in the region, it did not provide the full picture of the makeup of the region's particulate matter. The nature of particulates is that larger, coarser particles tend to settle out of the air closer to their emission source, while smaller particles the size of PM_{2.5} tend to remain suspended in the air longer and travel further.

BAAQMD's analysis showed that, for annual average PM_{2.5}, the largest source categories are on- and off-road motor vehicle exhaust and carbon from cooking and wood-burning activities. These categories include both directly emitted PM and secondary PM, such as ammonium nitrate formed by atmospheric reactions of ammonia with nitrogen oxides from motor vehicles and other combustion sources. Geological dust was found to be a minor component of ambient particulate matter.

Subsequently, it was determined that during the winter, residential wood smoke and cooking were major contributors to ambient particulate matter. Combustion PM_{2.5}, which includes vehicle exhaust, was the second major component of PM_{2.5} and a significant component of PM₁₀. Ammonium nitrate was also a principal component of ambient PM. Road dust and other dust producing activities contributed to ambient PM₁₀ but not significantly to PM_{2.5} and had a more local impact.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 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. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Motor vehicles are the dominant source of CO emissions in most areas. CO is described as having only a local influence because it dissipates quickly. 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). These conditions result in reduced dispersion of vehicle emissions. Because CO is a product of incomplete combustion, motor vehicles exhibit increased CO emission rates at low air temperatures. High CO concentrations occur in areas of limited geographic size sometimes referred to as hot spots. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death.

Toxic air contaminants are less pervasive in the urban atmosphere than criteria air pollutants, but they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to the 2005 California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). DPM is a subset of PM_{2.5} because the size of diesel particles are typically 2.5 microns and smaller. The identification of DPM as a toxic air contaminant in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in DPM by 2010 and an 85-percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of DPM as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to DPM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

Asbestos

Asbestos is the name given 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, also known as white asbestos, 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 United States.

In addition, asbestos is also found in a natural state. 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. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

To address some of the health concerns associated with exposure to asbestos from these activities, CARB has adopted two Airborne Toxic Control Measures (ATCMs). CARB has an ATCM for

construction, grading, quarrying, and surface mining operations requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. This ATCM applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The ATCM also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity.

In addition, CARB has an ATCM for surfacing applications. This ATCM applies to any person who produces, sells, supplies, offers for sale or supply, uses, applies, or transports any (1) aggregate material extracted from property where any portion of the property is located in a geographic ultramafic rock unit or (2) aggregate material extracted from property that is NOT located in a geographic ultramafic rock unit if the material has been evaluated at the request of the Air Pollution Control Officer and has been determined to be ultramafic rock or serpentine; tested at the request of the Pollution Control Officer and determined to have an asbestos content of 0.25 percent or greater; or determined by the owner/operator of a facility to be ultramafic rock, serpentine, or material that has an asbestos content of 0.25 percent or greater. The ATCM prohibits persons from using, applying, selling, supplying, or offering for sale or supply any restricted material for surfacing unless it has been tested and determined to have an asbestos content of less than 0.25 percent.)

Greenhouse Gases

Constituent gases of the Earth's atmosphere called atmospheric greenhouse gases play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone, water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO₂ and NO_x are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO₂ include uptake by vegetation and dissolution into the ocean.

Global warming is a global problem, and greenhouse gases are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Worldwide, California is the 12th to 16th largest emitter of CO₂, and is responsible for approximately 2 percent of the world's

CO₂ emissions. In 2004, California produced 492 million gross metric tons of carbon dioxide-equivalent.

Various local and statewide initiatives to reduce the State's contribution to greenhouse gas emissions have raised awareness that, even though the possible outcomes and feedback mechanisms associated with climate change are not yet fully understood, global warming is already upon us, and the potential for environmental, social, and economic disaster over the long term has the potential to be great. Cooperation on a global scale will be required to reduce greenhouse gas emissions to a level that will slow the warming trend, and the direct air quality impact of increasing greenhouse gas emissions into the global system is incrementally cumulative.

Direct and Indirect Aerosol Effects

Aerosols, including particulate matter, reflect sunlight back to space. As attainment designations for particulate matter are met, and fewer particulate matter emissions occur, the cooling effect of anthropogenic aerosols would be reduced, and instead, the greenhouse effect would be further enhanced. Similarly, aerosols act as cloud condensation nuclei to aid in cloud formation and increase cloud lifetime. Clouds efficiently reflect radiation back to space.

The indirect effect of aerosols on clouds and precipitation efficiency would be reduced, amplifying the greenhouse effect again.

Cloud Effect

As global temperature rises, the ability of the air to hold moisture increases, and facilitation of cloud formation occurs. If the increase in cloud cover occurs at low or middle altitudes, resulting in clouds with greater liquid water path such as stratus or cumulus clouds, more radiation would be reflected back to space, resulting in a negative feedback, wherein the side effect of global warming acts to balance itself. If cloud formation occurs at higher altitudes in the form of cirrus clouds, these clouds actually allow more light to pass through than they reflect and ultimately, act as greenhouse gases themselves, thus resulting in a positive feedback wherein the side effect of global warming acts to enhance the process. This feedback mechanism, known as the Cloud Effect, is not well understood.

Other Feedback Mechanisms

As global temperature continues to rise, methane gas, which is trapped in permafrost, would be released into the atmosphere. Methane is approximately 20 times as efficient a greenhouse gas as CO₂. This phenomenon would accelerate and enhance the warming trend. Additionally, as polar and sea ice extent continues to diminish, the Earth's albedo, or reflectivity, would simultaneously decrease. More incoming solar radiation would be absorbed by the Earth rather than reflected back to space, in turn, further enhancing the Greenhouse Effect and associated global warming. These and other competing feedback mechanisms are still in the process of being coupled and forecast by the scientific community. It is not known at this time how the ultimate balance among all the variables will be equated to a particular temperature increment. Regardless, there is no longer debate within

the scientific community that anthropogenic greenhouse gas emissions are linked to a trajectory of unnatural warming of the planet.

As defined under AB 32, greenhouse gas emissions include the following: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Global Warming Potential

Greenhouse gases have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas.” One teragram of carbon dioxide equivalent (Tg CO₂ Eq.) is essentially the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The carbon dioxide equivalent is a good way to assess emissions because it gives weight to the GWP of the gas. A summary of the atmospheric lifetime and GWP of selected gases is summarized in Table 4.2-1. As shown in the table, GWP ranges from 1 to 23,900.

Table 4.2-1: Global Warming Potential

Greenhouse Gas	Global Warming Potential (100-year time horizon)
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	21
Nitrous oxide (N ₂ O)	310
HFC-23	11,700
HFC-134a	1300
HFC-152a	140
PFC: Tetrafluoromethane (CF ₄)	6,500
PFC: Hexafluoroethane (C ₂ F ₆)	9,200
Sulfur hexafluoride (SF ₆)	23,900
Source: United States Environmental Protection Agency, 2006.	

Local Air Quality

Emission Sources

California is a diverse state with many sources of air pollution. To estimate the sources and quantities of pollution, CARB, in cooperation with local air districts and industry, maintains an inventory of California emission sources. Sources are subdivided into four major emission categories: stationary sources, areawide sources, mobile sources, and natural sources. Stationary source emissions are based on estimates made by facility operators and local air districts. Emissions from specific facilities can be identified by name and location. CARB and local air district staffs estimate area-wide emissions. Emissions from area-wide sources may be either from small individual sources, such

as residential fireplaces, or from widely distributed sources that cannot be tied to a single location, such as consumer products and dust from unpaved roads. CARB staff estimates mobile source emissions with assistance from districts and other government agencies. Mobile sources include on-road cars, trucks, and buses and other sources such as boats, off-road recreational vehicles, aircraft, and trains. CARB staff and the air districts also estimate natural sources. These sources include geogenic (e.g., petroleum seeps), biogenic (vegetation) sources, and wildfires.

Table 4.2-2 summarizes estimated 2005 emissions of key criteria air pollutants from major categories of air pollutant sources. For each pollutant, estimated emissions are presented for Contra Costa County. No further spatial refinement is available.

Table 4.2-2: Contra Costa County 2005 Emissions Inventory (tons/day)

Emission Category	ROG	CO	NO _x	PM ₁₀	PM _{2.5}
Fuel combustion	1.95	14.36	21.90	3.27	3.24
Waste disposal	0.44	0.01	0.11	0	0
Cleaning and surface coatings	2.87	0	0	0	0
Petroleum production and marketing	14.24	12.30	0.72	0.59	0.54
Industrial processes	3.11	0.94	2.26	1.94	1.33
Solvent evaporation	10.73	0	0	0	0
Miscellaneous processes	2.37	25.00	2.89	23.97	7.80
On-road motor vehicles	22.51	224.95	39.48	1.39	0.93
Other mobile sources	8.91	68.98	27.39	1.82	1.64
Natural sources	11.35	0.12	0	0.01	0.01
TOTAL	78.48	346.66	94.75	32.99	15.49
Notes: All values in tons per day. 2005 is estimated from a base year inventory for 2004 based on growth and control factors available from CARB. The sum of values may not equal total shown due to rounding. Source: California Air Resources Board, 2007.					

Contra Costa County is similar to many other portions of California and the United States in general, in that a large portion of the CO emissions comes from on-road mobile sources (65 percent), with the majority coming from passenger cars and trucks. On-road mobile sources are also a primary source of NO_x but to a lesser degree, with 42 percent coming from passenger cars and trucks. Heavy-duty diesel trucks supply a large portion (26 percent) of that on-road NO_x total. Other significant NO_x sources in Contra Costa County include off-road equipment primarily from construction (19 percent) and petroleum refining combustion (13 percent). In Contra Costa County, almost 30 percent of the ROG emissions come from on-road motor vehicles, another 15 percent come from biogenic sources, and 9 percent come from consumer products. PM₁₀ primarily comes from an emissions category called “miscellaneous processes,” which includes a variety of subcategories. In the case of Contra Costa County’s emissions, these subcategories are primarily paved road dust, construction and

demolition, and residential fuel combustion. Even though the majority of PM_{2.5} also comes from the same subcategories, another significant source is from combustion (21 percent) primarily from petroleum refineries.

Monitoring Data

Meteorology acts on the emissions released into the atmosphere to produce pollutant concentrations. These airborne pollutant concentrations are measured throughout California at air quality monitoring sites. CARB operates a statewide network of monitors. Data from this network are supplemented with data collected by local air districts, other public agencies, and private contractors. There are more than 250 criteria pollutant monitoring sites in California. Each year, more than ten million air quality measurements from all of these sites are collected and stored in a comprehensive air quality database maintained by CARB.

Existing levels of ambient air quality and historical trends and projections of air quality in the project area are best documented from measurements made near the project site. The air quality monitoring station closest to the site is located in Hayward on La Mesa Drive, approximately 8 miles south-southwest of San Ramon. The only pollutant measured at this station is ozone. The nearest monitoring station measuring particulate matter, carbon monoxide, and nitrogen dioxide is located in Livermore on Rincon Avenue, approximately 11 miles southeast of San Ramon. Table 4.2-3 summarizes 2004–2006 published monitoring data. The data shows that no federal standards were exceeded at any of the nearest air monitoring stations. The State standard for ozone during a 1-hour average was exceeded only twice in 2006 at the Hayward station, and the State standard for PM₁₀ during a 24-hour period and as an annual average was exceeded only three times in 2006 at the Livermore station. The data shows that no exceedances of State or federal standards were recorded in 2004 and 2005.

Table 4.2-3: Ambient Air Monitoring Data (2004–2006)

Air Pollutant, Averaging Time (Units)	2004	2005	2006
Ozone (Hayward)			
Max 1 Hour (ppm)	0.088	0.093	0.101
Days > CAAQS (0.09 ppm)	0	0	2
Max 8 Hour (ppm)	0.070	0.070	0.071
Days > CAAQS (0.07 ppm)	ND	ND	ND
Days > NAAQS (0.08 ppm)	0	0	0
Particulate Matter (PM ₁₀) (Livermore)			
Mean (µg/m ³)	20.0	18.8	21.8
24 Hour (µg/m ³)	48.8	49.4	69.2
Days > CAAQS (50 µg/m ³)	0	0	3
Days > NAAQS (150 µg/m ³)	0	0	0

Table 4.2-3 (Cont.): Ambient Air Monitoring Data (2004–2006)

Air Pollutant, Averaging Time (Units)	2004	2005	2006
Particulate Matter (PM _{2.5}) (Livermore)			
Mean (µg/m ³)	10.2	9.0	ID
24 Hour (µg/m ³) Days > NAAQS (35 µg/m ³)	40.8 0	32.1 0	50.8 0
Carbon Monoxide (Livermore)			
Max 8 Hour (ppm) Days > CAAQS (9.0 ppm) Days > NAAQS (9.0 ppm)	1.81 0 0	1.79 0 0	1.79 0 0
Nitrogen Dioxide (Livermore)			
Mean (ppm)	0.014	0.014	0.014
Max 1 Hour (ppm) Days > CAAQS (0.25 ppm)	0.063 0	0.072 0	0.064 0
Abbreviations: > = exceed ppm = parts per million µg/m ³ = micrograms per cubic meter ID = insufficient data ND = no data max = maximum CAAQS = California Ambient Air Quality Standard NAAQS = National Ambient Air Quality Standard Mean = Annual Arithmetic Mean Source: California Air Resources Board, 2007.			

Sensitive Receptors

The location of a development project is a major factor in determining whether it will result in localized air quality impacts. The potential for adverse air quality impacts increases as the distance between the source of emissions and members of the public decreases. Impacts on sensitive receptors are of particular concern. Sensitive receptors are defined as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors. Sensitive receptors in the project vicinity are summarized in Table 4.2-4. As mentioned above, residential areas are examples of sensitive receptors. The Marriot Residence Inn and the Reflections Condominiums are considered sensitive receptors because of the potential for children and the elderly to reside in these developments.

Table 4.2-4: Sensitive Receptors

Sensitive Receptor	Address	Relationship to Project Site
Marriot Residence Inn	1071 Market Place	180 feet east of Parcel 1A
Reflections Condominiums	205 Reflections Drive	210 feet east of Parcel 1A

Table 4.2-4 (Cont.): Sensitive Receptors

Sensitive Receptor	Address	Relationship to Project Site
Iron Horse Middle School	12601 Alcosta Boulevard	2,000 feet northeast of Parcel 3A
Source: Michael Brandman Associates, 2007.		

4.2.3 - Regulatory Framework

Air pollutants are regulated at the national, State, and air basin level; each agency has a different degree of control. The EPA regulates at the national level, CARB at the State level, and BAAQMD at the air basin level.

Federal

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 (SIP); provides research and guidance in air pollution programs; and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are NAAQS for six common air pollutants, called criteria air pollutants, which were identified from provisions of the federal Clean Air Act (CAA) of 1970. The six criteria pollutants are:

- Ozone (O₃)
- Particulate matter (PM₁₀ and PM_{2.5})
- Nitrogen dioxide (NO₂)
- Carbon monoxide (CO)
- Lead
- Sulfur dioxide (SO₂)

The NAAQS were set to protect the health of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

State

CARB has overall responsibility for statewide air quality maintenance and air pollution prevention. The SIP for the State of California is administered by CARB. A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS. CARB also administers California ambient air quality standards, or State standards, for the ten air pollutants designated in the California Clean Air Act (CCAA). All of the national criteria pollutants are also regulated by the State, but California adds four pollutants. The additional State air pollutants are:

- Visibility reducing particulates
- Hydrogen sulfide

- Sulfates
- Vinyl chloride

The national and State ambient air quality standards and the most relevant effects are summarized in Table 4.2-5.

Table 4.2-5: Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	National Standard	Most Relevant Effects
Ozone	1-hour	0.09 ppm	—	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function
	8-hour	0.070 ppm	0.08 ppm	
				decrements in chronically exposed humans; (e) Vegetation damage; (f) Property damage
Carbon monoxide (CO)	1-hour	20 ppm	35 ppm	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) impairment of central nervous system functions; (d) possible increased risk to fetuses
	8-hour	9.0 ppm	9 ppm	
Nitrogen dioxide (NO ₂)	1-hour	0.18 ppm*	—	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) contribution to atmospheric discoloration
	Mean	0.030 ppm*	0.053 ppm	
Sulfur dioxide (SO ₂)	1-hour	0.25 ppm	—	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
	24 hours	0.04 ppm	0.14 ppm	
	Mean	—	0.030 ppm	
Particulate matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) declines in pulmonary function growth in children; (c) increased risk of premature death from heart or lung diseases in the elderly
	Mean	20 µg/m ³	—	
Particulate matter (PM _{2.5})	24-hour	—	35 µg/m ³	
	Mean	12 µg/m ³	15 µg/m ³	

Table 4.2-5 (Cont.): Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	National Standard	Most Relevant Effects
Sulfates	24-hour	25 µg/m ³	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage
Lead	30-day	1.5 µg/m ³	—	(a) Learning disabilities; (b) impairment of blood formation and nerve conduction
	Quarter	—	1.5 µg/m ³	
Abbreviations: ppm = parts per million µg/m ³ = micrograms per cubic meter Mean = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter * The nitrogen dioxide ambient air quality standard was amended on February 22, 2007. These changes become effective after regulatory changes are submitted and approved by the Office of Administrative Law, expected in 2007. Source: CARB, Ambient Air Quality Standards, 2007.				

Greenhouse Gas Emissions

CARB has not identified a significance threshold for greenhouse gas emissions to use in CEQA documents. In addition, no air district in California has generated a significance threshold pertaining to greenhouse gas emissions. The State has identified statewide emissions in the year 1990 as a goal through the adoption of AB 32. It is recognized, though, that there is no simple measure available to determine if a single project would advance toward or away from this goal. Because greenhouse gases are global, a project that shifts the location of where someone lives or works, by itself, may or may not contribute new greenhouse gases. For example, if a person were to move from Southern California to the Bay Area, it is not conclusive that this would result in generation of more greenhouse gas emissions globally. In fact, if a person moves from one location—where they have long commutes and a land use pattern that requires substantial energy use, to a project that promotes shorter and fewer vehicle trips, more walking, and less energy use—it could be argued that the new project would result in a potential reduction in generation of global greenhouse gas emissions.

The California Energy Commission issued a report in June 2007, titled “The Role of Land Use in Meeting California’s Energy and Climate Change Goals,” which asserted that lengthy commutes and reliance on private vehicles are two of the leading causes of greenhouse gas emissions in California. The report recommended using land use planning tools to promote reductions in vehicle usage and trip length through mixed-use and transit-oriented development.

The California Environmental Protection Agency Climate Action Team developed a report that “proposes a path to achieve the Governor’s targets that will build on voluntary actions of California businesses, local government and community actions, and State incentive and regulatory programs” needed to reduce activities that contribute to global climate change. There are no adopted thresholds

to assess the significance of project impacts. The report indicates that the strategies will reduce California's emissions to the levels proposed in Executive Order S-3-05.

The California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, the State agency charged with regulating statewide air quality, to adopt rules and regulations that by 2020 would achieve a reduction in greenhouse gas emissions equivalent to the statewide inventory levels of 1990. On or before June 30, 2007, CARB is required to publish a list of discrete greenhouse gas emission reduction measures that can be implemented. On April 20, 2007, CARB published their proposed early actions that include discrete early action measures, additional greenhouse gas reduction strategies, and criteria and toxic control measures.

The basis for these greenhouse gas reduction goals that California has adopted into law is provided in the IPCC climate models, which predict the climate stabilizing at an approximately 2-degree-Celsius rise in average temperatures long term.

Bay Area Air Quality Management District

BAAQMD regulates air quality in the San Francisco Bay Area Air Basin, which consists of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties; the western portion of Solano County; and the southern portion of Sonoma County. BAAQMD is responsible for controlling and permitting industrial pollution sources (such as power plants, refineries, and manufacturing operations) and widespread areawide sources (such as bakeries, dry cleaners, service stations, and commercial paint applicators), and for adopting local air quality plans and rules.

The most recent air quality plan in the Air Basin is the Bay Area 2005 Ozone Strategy, which was prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) and was adopted on January 4, 2006. The Strategy identifies how the San Francisco Bay Area will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins.

Attainment Status

Air basins where ambient air quality standards are exceeded are referred to as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are considered severe, serious, or moderate as a function of deviation from standards.

As shown in Table 4.2-6, the Bay Area is in nonattainment for the national and State 1-hour ozone standard and the State PM₁₀ standard. As shown in the table, the Bay Area is in nonattainment for the State 1-hour ozone standard, national 8-hour ozone standard, State 24-hour and annual PM₁₀ standard, and the State annual PM_{2.5} standard. This means that the area experiences poor air quality at times.

Table 4.2-6: Bay Area Air Basin Attainment Status

Pollutant	Averaging Time	State Status	National Status
Ozone	1-hour	Nonattainment	Not applicable ¹
	8-hour	Unclassified	Nonattainment ²
Carbon monoxide	1-hour and 8-hour	Attainment	Attainment ³
Nitrogen dioxide	1-hour	Attainment	No federal standard
	Annual	No State standard	Attainment
Sulfur dioxide	24-hour; 1-hour	Attainment	Attainment
PM ₁₀	24-hour	Nonattainment	Unclassified
	Annual	Nonattainment	No federal standard ⁴
PM _{2.5}	24-hour	No State standard	Unclassified
	Annual	Nonattainment	Attainment

Notes:
¹ The national 1-hour ozone standard was revoked by EPA on June 15, 2005.
² In June 2004, the Bay Area was designated as a marginal nonattainment area of the national 8-hour ozone standard.
³ In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
⁴ EPA revoked the annual PM₁₀ standard on September 21, 2006.
Source: Bay Area Air Quality Management District, 2007.

Regional Significance Thresholds

As stated in Appendix G, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. These thresholds are primarily based on the BAAQMD CEQA Guidelines. However, BAAQMD is in the process of updating these Guidelines, and, therefore, practical modifications of some of the published thresholds are being recommended in practice. Where a difference is recommended, it will be so noted. The BAAQMD suggest that an air quality impact is considered significant if implementation of the proposed project or alternatives under consideration would result in any of the impacts discussed below.

Construction Impacts

Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. The BAAQMD historically considered PM₁₀ the pollutant of greatest concern deriving from construction activities. PM₁₀ emissions can result from a variety of construction activities, including excavation, grading, demolition, pile driving, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. BAAQMD is concerned that construction-related emissions can cause substantial increases in localized concentrations of PM₁₀ and can lead to adverse health effects, as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces.

Historically, BAAQMD had identified a set of feasible PM₁₀ control measures for construction activities that were considered the determining factor of significance for construction activities.

However, BAAQMD is increasingly recognizing the importance of PM₁₀ and PM_{2.5} from construction activities and the emissions of carbon monoxide and ozone precursors from construction equipment. Therefore, BAAQMD now recommends that quantification of construction emissions is necessary.

Since the BAAQMD have not yet officially set specific thresholds of significance for construction activities but would like analyses to assign them greater importance, this report will use the threshold established by the BAAQMD for operational emissions. Therefore, an air quality impact is considered significant if implementation of the proposed project or alternatives under consideration would generate construction-related emissions that exceed 80 lb/day for NO_x, ROG, or PM₁₀.

Project Operations

For many types of land use development, such as office parks, shopping centers, residential subdivisions and other “indirect sources”, motor vehicles traveling to and from the projects represent the primary source of air pollutant emissions associated with project operations. Significance thresholds established by the BAAQMD are discussed below and address the impacts of these indirect source emissions on local and regional air quality. Thresholds are also provided for other potential impacts related to project operations, such as odors and toxic air contaminants.

Total Emissions

Total emissions from project operations should be compared to the thresholds provided in Table 4.2-7. Total operational emissions evaluated under this threshold should include all emissions from motor vehicle use associated with the project. A project that generates criteria air pollutant emissions in excess of the annual or daily thresholds in the table below would be considered to have a significant air quality impact.

Table 4.2-7: BAAQMD Operational Significance Thresholds

Pollutant	Operation (pounds per day)
Oxides of nitrogen (NO _x)	80
Reactive organic gases (ROG)	80
Particulate matter (PM ₁₀)	80
Source: BAAQMD CEQA Guidelines, 1999.	

Local Carbon Monoxide Concentrations

Localized carbon monoxide concentrations should be estimated for projects in which (1) vehicle emissions of CO would exceed 550 pounds per day; (2) project traffic would significantly impact intersections or roadway links operating at Level of Service (LOS) D, E, or F or would cause LOS to decline to D, E, or F; or (3) project traffic would increase traffic volumes on nearby roadways by 10 percent or more unless the increase in traffic volume is less than 100 vehicles per hour. A project contributing to CO concentrations exceeding the CAAQS of 9 ppm averaged over 8 hours and 20 ppm for 1 hour would be considered to have a significant impact.

Odors

While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the District. Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

Greenhouse Gases

The BAAQMD is one of the most proactive air districts in the State concerning greenhouse gas emissions and climate change issues. In 2005, BAAQMD initiated a Climate Protection Program, and on June 1, 2005, the District Board of Directors adopted a resolution establishing a Climate Protection Program and acknowledging the link between climate protection and programs to reduce air pollution in the Bay Area. A central element of BAAQMD's climate protection program is the integration of climate protection activities into existing District programs. In addition, BAAQMD's climate protection program emphasizes collaboration with ongoing climate protection efforts at local and State levels, public education and outreach, and technical assistance to cities and counties. In November 2006, BAAQMD prepared a district-wide Source Inventory of Bay Area Greenhouse Gas Emissions.

Cumulative Impacts

The BAAQMD has set the threshold for cumulative significance, as any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. Additionally, for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact should be based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan.

If a project is proposed in a city or county with a general plan that is consistent with the Clean Air Plan and the project is consistent with that general plan (i.e., it does not require a general plan amendment), then the project will not have a significant cumulative impact (provided, of course, the project does not individually have any significant impacts). No further analysis regarding cumulative impacts is necessary.

Local

Local government's responsibility for air quality increased significantly with the passage of the CCAA and the federal CAA 1990 amendments. Both of these pieces of legislation placed new emphasis on reducing motor vehicle trips and vehicle miles traveled at the local level. Although the District is required to address air quality standards by way of transportation control measures (TCMs) and indirect source programs in its air quality attainment plans, cities and counties, through their Councils of Government, are responsible for much of the implementation.

The City of San Ramon General Plan, voter-approved March 5, 2002, contains guiding and implementing policies that together articulate a vision for San Ramon and provides protection for the City's resources by establishing planning requirements, programs, standards, and criteria for project review. Listed below are policies and programs contained in the General Plan that are pertinent to the protection of air quality.

4.2.4 - Methodology

Michael Brandman Associates prepared a stand-alone air quality analysis of the proposed project in June 2007. The air quality analysis was prepared using the BAAQMD CEQA Guidelines and supplemented with information included in the Traffic Operations Evaluation prepared for the proposed project by DMJM Harris (see Section 4.12, Transportation). Data included LOS calculations, average daily vehicle trips, and turning movements at intersections. This information was used to determine the operational vehicular emissions of the proposed project. Daily increases in vehicular and area emissions associated with the proposed project were estimated using the CARB-approved URBEMIS2007 Version 9.2 computer program based on default assumptions contained in the model. Constriction emissions were also modeled using URBEMIS2007 Version 9.2. The CO hot spot analysis was prepared in accordance with the University of California, Davis Institute of Transportation Studies document, Transportation Project-Level Carbon Monoxide Protocol.

4.2.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to air quality are significant environmental effects, the following questions are analyzed and evaluated:

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

- a.) Conflict with or obstruct implementation of the applicable air quality plan?
- b.) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c.) 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)?
- d.) Expose sensitive receptors to substantial pollutant concentrations?
- e.) Create objectionable odors affecting a substantial number of people?

4.2.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Construction and Operational Emissions

Impact AIR-1: **The proposed project would result in substantial emissions of criteria pollutants during construction and operations.**

Impact Analysis

This impact analyzes air emissions associated with construction and operation of the proposed project. Each topic is discussed separately.

Construction Emissions

Short-term impacts will include fugitive dust and other particulate matter, as well as exhaust emissions generated by earthmoving activities and operation of grading equipment during site preparation. Construction emissions are caused by onsite or offsite activities. Onsite emissions principally consist of exhaust emissions (NO_x, SO_x, CO, ROG, PM₁₀, and PM_{2.5}) from heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Offsite emissions are caused by motor vehicle exhaust from delivery vehicles, as well as worker traffic, but also include road dust (PM₁₀). Major construction-related activities include the following:

- Grading/clearing, including the excavation
- Excavation and earthmoving for infrastructure construction of the utilities, both on- and offsite, and dwelling unit foundations and footings
- Building construction
- Asphalt paving of access roads throughout the development
- Application of architectural coatings for things such as dwelling stucco and interior painting

Construction equipment such as scrapers, bulldozers, forklifts, backhoes, water trucks, and industrial saws are expected to be used on the project site and will result in exhaust emissions. During the finishing phase, paving operations and application of architectural coatings will release ROG emissions. Construction emission can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions.

Because no information was available about the proposed project's construction fleet at the time of this writing, fleet assumptions were derived from a spreadsheet developed by the San Joaquin Valley Unified Air Pollution Control District for its Indirect Source Rule. Construction emissions include demolition of Bishop Ranch 2, as well as grading, building construction, and paving. The project's construction plan is to phase out construction of the projects different parcels over a period of years. The construction timeline is detailed in Table 4.2-8. Because the threshold of significance is based on

maximum pounds per day and the construction timeline has overlapping schedules, more than one parcel would be having activity at the same time. Therefore, construction emissions were estimated on a maximum-pounds-per-day basis for each year of activity.

Table 4.2-8: Estimated Project Construction Plan

Parcel	Commencement of Construction	Duration of Construction
Plaza District	Fall 2008	24 months
Bishop Ranch 1A – Phase 1	Mid-2008	14 months
Bishop Ranch 1A – Phase 2	Mid-2009	14 months
Bishop Ranch 1A – Phase 3	Mid-2010	14 months
City Hall and Transit Center	Mid-2009	18 months
Source: Sunset Development Company, 2007.		

Table 4.2-9 summarizes these construction-related emissions (without mitigation) for the proposed Project. Only emissions with quantifiable thresholds are presented. The emission estimates were derived from the project description using the CARB URBEMIS2007 Version 9.2 emission model.

Table 4.2-9: Project Construction Emissions (Unmitigated)

Year	Maximum Emissions (lbs/d)			
	ROG	NO _x	CO	PM ₁₀
Regional Threshold	80.0	80.0	550.0	80.0
Year 2008	46.1	456.6	224.0	403.1
Significant Impact?	No	Yes	No	Yes
Year 2009	343.6	575.1	417.5	496.6
Significant Impact?	Yes	Yes	No	Yes
Year 2010	461.6	306.8	326.0	83.0
Significant Impact?	Yes	Yes	No	Yes
Year 2011	141.1	39.0	44.1	2.8
Significant Impact?	Yes	No	No	No
Source: Michael Brandman Associates, 2007.				

The information shown in Table 4.2-9 indicates that for the proposed project, the BAAQMD construction emission thresholds will be exceeded in 2008 for NO_x and PM₁₀ emissions; in 2009 and 2010 for ROG, NO_x, and PM₁₀ emissions; and in 2011 for ROG emissions only. Therefore, construction emissions are considered to have a significant impact.

Mitigation is proposed that would require the implementation of construction air pollution control measures. Table 4.2-10 summarizes the mitigated construction-related emissions for the proposed

project. Only emissions with quantifiable thresholds are presented. The emission estimates with mitigations were derived from the project description using the CARB URBEMIS2007 Version 9.2 emission model. As shown in Table 4.2-10, after the implementation of mitigation, BAAQMD construction emission thresholds would still be exceeded in 2008 for NO_x and PM₁₀ emissions; in 2009 for ROG, NO_x, and PM₁₀ emissions; in 2010 for ROG and NO_x emissions; and in 2011 for ROG emissions. Therefore, construction emissions would be a significant unavoidable impact of the proposed project.

Table 4.2-10: Mitigated Project Construction Emissions

Year	Maximum Emissions (lbs/day)			
	ROG	NO _x	CO	PM ₁₀
Regional Threshold	80.0	80.0	550.0	80.0
Year 2008	46.1	456.6	224.0	156.1
Significant Impact?	No	Yes	No	Yes
Year 2009	343.6	575.1	417.5	193.2
Significant Impact?	Yes	Yes	No	Yes
Year 2010	461.6	306.8	326.0	38.5
Significant Impact?	Yes	Yes	No	No
Year 2011	141.1	39.0	44.1	2.6
Significant Impact?	Yes	No	No	No

Source: Michael Brandman Associates, 2007.

Toxic Air Contaminants

Project construction activities would involve demolition of Bishop Ranch 2, a 194,652-square-foot office complex that was constructed in the early 1980s. The federal ban on asbestos and lead building materials was instituted in 1978 and, therefore, the Bishop Ranch 2 structures do not contain these materials; therefore, demolition of Bishop Ranch 2 would not expose construction workers or the public to asbestos or lead air pollutants. Impacts would be less than significant.

Construction activities would also involve the use of diesel-powered construction equipment, which emit DPM. The CARB has identified DPM emissions as the primary TACs of concern for mobile sources. Risk assessments for residential areas exposed to TACs are generally based on a 70-year period of exposure. Construction is scheduled to begin in mid-2008 and end in late 2011. Since the use of construction equipment would be temporary and would not be close to the 70-year timeframe, exposure of sensitive receptors to TACs would not be substantial. Mitigation Measure AIR-1a includes measures that would reduce emissions of TACs. Even without this mitigation measure, emissions of DPM would not be substantial enough to be considered a significant health risk. Therefore, impacts would be less than significant.

Operational Emissions

Operational emission sources consist of mobile emissions and area source emissions. Mobile source emissions estimates are derived from motor vehicle traffic. Area source emissions estimates are derived from the consumption of natural gas, electricity, and consumer products, as well as emissions resulting from landscape maintenance. An estimate of the daily operational missions is derived by combining both mobile and area source emissions. Total daily emissions were estimated for summer, which is the ozone season and, therefore, provide a conservative estimate of emissions.

The operational emissions analysis accounts for the removal of Bishop Ranch 2, which is an existing source of mobile and area source emissions. Table 4.2-11 summarizes existing emissions from Bishop Ranch 2. Where appropriate, these emissions will be subtracted from the proposed project’s operational emissions.

Table 4.2-11: Existing Bishop Ranch 2 Emissions

Pollution Source	Emissions (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Source Emissions	1	1	3	—	—	—
Mobile Emissions	22	25	262	—	29	6
Emissions Totals (lbs/day)	23	26	265	—	29	6
Source: Michael Brandman Associates, 2007.						

Unmitigated emissions for the proposed project were calculated using the CARB URBEMIS2007 for Windows Version 9.2 model using trip generation rates supplied by the Traffic Operations Evaluation prepared by DMJM Harris. Unmitigated project operational emissions are presented in Table 4.2-12.

Table 4.2-12: Unmitigated Operational Emissions

Pollution Source	Emissions (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Source Emissions	38	17	23	>1	>1	>1
Mobile Emissions	287	358	3,625	3	537	103
Emissions Totals (lbs/day)	326	375	3,648	3	537	103
Bishop Ranch 2 Emissions	(23)	(26)	(265)	—	(29)	(6)
Adjusted Emissions (lbs/day)	303	349	3,383	3	508	97
BAAQMD Thresholds	80	80	550	N/A	80	N/A
Exceeds Threshold?	Yes	Yes	Yes		Yes	
Source: Michael Brandman Associates, 2007.						

As shown in Table 4.2-12, the proposed project's daily operational emissions would exceed BAAQMD thresholds for ROG, NO_x, CO, and PM₁₀. Therefore, project operational emissions are considered to have a significant impact.

Mitigation is proposed that would require the implementation of operational air pollution control measures. Table 4.2-13 summarizes the mitigated operations-related emissions for the proposed project. As shown in Table 4.2-13, operational emissions would exceed BAAQMD thresholds for ROG, NO_x, CO, and PM₁₀ emissions after the implementation of mitigation. Therefore, operational emissions would be a significant unavoidable impact of the proposed project.

Table 4.2-13: Mitigated Operational Emissions

Pollution Source	Mitigated Emissions (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Source Emissions	38	14	21	0	>1	>1
Mobile Emissions	218	264	2,679	2	397	76
Emissions Totals (lbs/day)	256	278	2,700	2	397	76
Bishop Ranch 2 Emissions	(23)	(26)	(265)	—	(29)	(6)
Adjusted Emissions (lbs/day)	233	252	2,434	2	368	70
BAAQMD Thresholds	80	80	550	N/A	80	N/A
Exceeds Threshold?	Yes	Yes	Yes		Yes	
Source: Michael Brandman Associates, 2007.						

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Construction Emissions

MM AIR-1a During construction activities, the following air pollution control measures shall be implemented:

- The project applicant shall designate an onsite Air Quality Compliance Monitor who shall be responsible for directing compliance with the Best Available Control Measures listed below for fugitive dust mitigation during project construction.
- For any earthmoving that is within 100 feet from any property lines, watering shall be performed as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.

- For all disturbed surface areas (except completed grading areas), dust suppression shall be applied in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind-driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.
- For all disturbed surface areas that are completed grading areas, water shall be applied to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind-driven fugitive dust, excluding any areas that are inaccessible because of excessive slope or other safety conditions. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.
- For all inactive disturbed surface areas, water shall be applied to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind-driven fugitive dust, excluding any areas that are inaccessible due to excessive slope or other safety conditions. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.
- For all unpaved roads, vehicle speed shall be limited to 15 miles per hour and water shall be applied at least once a day.
- For all open storage piles, water shall be applied to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind-driven fugitive dust. All watering activities shall adhere to the requirements of the proposed project's Storm Water Pollution Prevention Plan.
- To provide track-out control, chemical stabilization shall be paved or applied at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet.
- Rerouting or rapid cleanup of temporary sources of mud and dirt shall be provided on unpaved roads.
- Street sweeping of roads adjacent to the project site shall be done on a regular basis to reduce fugitive dust from traffic.
- During rough grading and construction, an apron shall be built into the project site from the adjoining paved roadways. The apron shall be paved or have a

petroleum-based palliative applied. All petroleum-based palliatives will comply with BAAQMD's Regulation 6, Rule 15.

- During rough grading and construction, streets including shoulders adjacent to the project site shall be swept at least once per day to reduce fugitive dust from traffic, or as required by governing body, to remove silt which may have accumulated from construction activities.
- All diesel-fueled engines used in the construction of the project shall use ultra-low sulfur diesel fuel, which contains no more than 15 ppm of sulfur, or alternative fuels (i.e., reformulated fuels, emulsified fuels, compressed natural gas, or power with electrification). Low-sulfur diesel fuel (500 ppm of sulfur content) shall be used only if evidence is obtained and maintained from the fuel supplier(s) that ultra-low sulfur diesel fuel is infeasible.
- Based on prevailing and generally available technology and to the extent that equipment and technology is cost-effective, the construction contractor shall use catalyst and filtration technologies, and retrofit existing engines in construction equipment
- The construction contractor shall discourage idling of construction equipment and vehicles (or minimize idling time to a maximum of 5 minutes when construction equipment is not in use). The contractor will post temporary signs on the construction site to remind equipment operators to minimize idling time.
- When feasible, emission-intensive phases of construction (e.g., demolition and grading) should occur between November and April, which is outside of the ozone season (May to October).
- In coordination with Mitigation Measure TRANS-9, the project applicant shall develop a Construction Traffic, Staging, and Parking Plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Operations affecting traffic for off-peak hours shall be scheduled. Obstruction of through-traffic lanes shall be minimized. When necessary, a flag person shall be provided to guide traffic properly and ensure safety at construction sites.

Operational Emissions

MM AIR-1b Prior to occupancy of each project component, the project applicant shall demonstrate to the satisfaction of the City of San Ramon that the following operational air quality pollution control measures have been installed (if applicable):

- Install display cases or kiosks in prominent areas that provide transportation information, including ridesharing information, transit schedules, and bicycle route and path information.
- Dock and delivery areas shall include:
 - Signage advising truck drivers to turn off engines when not in use
 - Signage advising truck drivers of State law prohibiting diesel idling of more than five minutes
 - Auxiliary 110 v and 220 v power units so trucks can power refrigeration units or other equipment without idling
- Mechanical ventilation that disperses exhaust efficiently shall be installed in all parking structures in accordance with State standards.
- Surface parking areas shall include clearly marked and shaded pedestrian pathways between transit facilities, adjacent sidewalks, and building entrances.
- Where safety and space constraints do not take precedence, loading and unloading facilities shall be provided near building entrances for transit and carpool/vanpool users with clear visible signage.
- Where practicable and beneficial to the project air quality objectives, cool paving and high-albedo construction materials shall be used for roads, driveways, and other select surfaces to increase reflectivity.
- Low nitrogen oxide-emitting or high-efficiency water heaters shall be installed.
- If the Plaza District residential units include fireplaces, only natural gas fireplaces shall be allowed; conventional open-hearth fireplaces shall not be permitted.
- All heating, ventilation, and air conditioning (HVAC) systems shall include high-efficiency filters for particulates and a carbon filter to remove other chemical matter.

Level of Significance After Mitigation

Significant unavoidable impact.

Carbon Monoxide Hot Spots

Impact AIR-2: **The proposed project would not create carbon monoxide hot spots that would exceed federal or State concentration standards.**

Impact Analysis

Carbon monoxide from mobile sources is the main pollutant of local concern and correlates to traffic volume, speed, and delay. Carbon monoxide emissions disperse quickly under normal meteorological

conditions but can reach unhealthy levels with more stagnant meteorological conditions. High concentrations of CO are often found near signalized intersections or roadway segments operating at LOS E or worse during peak-hour traffic.

The significance of project-related CO impacts is generally based on guidance presented in the CO Protocol prepared by the University of California, Davis, Institute of Transportation Studies. This document presents a series of criteria that are used to determine the significance of impacts. According to the CO Protocol, intersections with LOS E or F require detailed analysis. In addition, intersections that operate under LOS D conditions in areas that experience meteorological conditions favorable to CO accumulation require a detailed analysis.

The Traffic Operations Evaluation prepared for the proposed project (summarized in Section 4.12, Transportation) found that study area intersections are projected to operate at LOS D or better during peak hours after the implementation of mitigation. Because no intersections would operate at LOS E or F, the CO Protocol indicates that there is no potential for the creation of CO hot spots. Therefore, CO hot spot impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Cumulative Air Quality Impacts

Impact AIR-3: Because operational emissions would exceed regional thresholds, the proposed project would have a significant cumulative impact on air quality.

Impact Analysis

The BAAQMD CEQA Guidelines indicate that any project that creates a significant individual air quality impact would also have a cumulatively considerable impact on regional air quality. As discussed in Impact AIR-1, the proposed project would result in construction and operational emissions that exceed BAAQMD thresholds and, therefore, result in a significant project-level impact. Mitigation is proposed, but it would not reduce project construction and operation emissions below BAAQMD thresholds. Therefore, project-level emissions would be significant and unavoidable and result in a cumulatively considerable impact on regional air quality.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Refer to Mitigation Measures AIR-1a and AIR-1b.

Level of Significance After Mitigation

Significant unavoidable impact.

Air Quality Management Plan Consistency

Impact AIR-4: **The proposed project would be inconsistent with the projections contained in the BAAQMD Clean Air Plan.**

Impact Analysis

The BAAQMD Clean Air Plan is the regional air quality management plan for the San Francisco Bay Area. The Clean Air Plan accounts for projections of population growth provided by ABAG and vehicle miles traveled provided by the Metropolitan Transportation Commission, and it identifies strategies to bring regional emissions into compliance with federal and State air quality standards. Because population growth and vehicle miles traveled projections are the bases of the Clean Air Plan's strategies, a project would conflict with the plan if it results in more growth or vehicle miles traveled relative to the plan's projections.

As discussed in the detail in Section 4.10, Population and Housing, the City of San Ramon's 2010 population is anticipated to exceed ABAG's projections by 10.5 percent. With the addition of population growth facilitated by the proposed project, the exceedance is expected to increase to 15.8 percent. In addition, the proposed project would generate a net increase of 24,926 daily vehicle trips, which is a substantial increase above the existing 2,023 vehicle trips generated by Bishop Ranch 2 and the forecasted 3,178 vehicle trips associated with the existing 328,200-square-foot entitlement on Parcel 1A. Therefore, the proposed project would result in increases in population growth and vehicle miles traveled that exceed the assumptions contained in the Clean Air Plan. This is considered a conflict with the regional air quality management plan and is a significant impact for which no mitigation is available to reduce it to a level of less than significant. Therefore, this would be a significant in unavoidable impact of the proposed project.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

No mitigation is available.

Level of Significance After Mitigation

Significant unavoidable impact.

Sensitive Receptors

Impact AIR-5: **The proposed project would not expose sensitive receptors to substantial pollutant concentrations.**

Impact Analysis

The sensitive receptors of most concern as they relate to the proposed project are the Marriot Residence Inn, the Reflections Condominiums, and Iron Horse Middle School. As discussed in Impact AIR-1, project construction activities would be of temporary duration and would not have the potential to expose sensitive receptors to substantial concentrations of TACs, including DPM. Operational activities associated with the proposed project would result in regular truck deliveries by diesel-powered tractor-trailers. The two anchor stores, the hotel, the cinema, the in-line retail shops, Bishop Ranch 1A, and City Hall would receive regular deliveries or pick-ups from trucks. Generally, deliveries would occur at different times during the day and would not be expected to occur more than 10 times daily for any project use. In addition, State law prohibits the idling of diesel trucks for more than 5 minutes in loading areas. Mitigation Measure AIR-1b includes a provision requiring auxiliary outlets be provided in loading areas so that trucks do not need to idle to power refrigeration units. Because of the distribution of deliveries, the distance between the nearest loading docks and the nearest school-related receptor, and the prohibition on extended idling, operational emissions of diesel particulate matter would not expose sensitive emissions of toxic air pollutants. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Objectionable Odors

Impact AIR-6: **The proposed project would not generate objectionable odors that would affect a substantial number of people.**

Impact Analysis

The proposed project would develop mixed-uses including residential, commercial retail, office, and civic uses in an existing urbanized area. None of these uses would generate substantial odors (e.g., agriculture). Odors may be apparent in and around dumpsters and other refuse collection facilities; however, these facilities would be located away from publicly accessible areas (e.g., in loading areas), and odors would be localized in a manner that would not affect a substantial number of people. Therefore, potential odor impacts created by the proposed project would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Greenhouse Gas Emissions

Impact AIR-7: Emissions from the proposed project would represent a cumulatively considerable contribution to global greenhouse gas emissions.

Impact Analysis

While neither the CEQA Guidelines nor any judicial decision require an evaluation of a project's emissions of greenhouse gases, consistent with the public policy rationale underlying AB 32, this impact analyzes the significance of the project's greenhouse gas emissions.

Parts of the Earth's atmosphere act as an insulating blanket of just the right thickness, trapping sufficient solar energy to keep the global average temperature in a suitable range. The blanket is a collection of atmospheric gases called greenhouse gases, based on the idea that the gases also trap heat like the glass walls of a greenhouse. These gases—water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)—all act as effective global insulators, reflecting back to Earth visible light and infrared radiation. Human activities such as producing electricity and driving vehicles have elevated the concentration of these gases in the atmosphere. Many scientists believe that these, in turn, are causing the Earth's temperature to rise, although other scientists disagree. A warmer Earth may lead to changes in rainfall patterns, much smaller polar ice caps, a rise in sea level, and a wide range of impacts on plants, wildlife, and humans.

Project-Specific Impacts

An individual project cannot generate enough greenhouse gas emissions to significantly influence global climate change. The project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases, which when taken together form global climate change impacts.

Cumulative Impacts

The following discussion reviews the project's potential generation of greenhouse gases and its incremental contribution to the cumulative effect of the greenhouse gases. A two-tiered approach is used: (1) project inventory of greenhouse gas emissions and (2) project compliance with the emission reduction strategies contained in the California Climate Action Team's Report to the Governor.

Greenhouse Gas Inventory

The emissions are estimated in tons per year, which are converted to teragrams of carbon dioxide equivalents (Tg CO₂ Eq.) using the formula $Tg\ CO_2\ Eq. = (tons\ of\ gas) \div 1.12\ (metric\ tons\ per\ ton) \times (GWP) \times (1,000,000)$. One Tg is equal to one million metric tons, and one metric ton is equal to 2.24 tons.

Note that emissions models such as EMFAC and URBEMIS evaluate aggregate emissions and do not demonstrate, with respect to a global impact, how much of these emissions are “new” emissions specifically attributable to the proposed project. For most projects, the main contribution of greenhouse gas emissions is from motor vehicles, but how much of those emissions are “new” is uncertain. New projects do not create new drivers. Some mixed use and transportation-oriented projects can actually reduce the number of vehicle miles traveled that a person drives by eliminating the need to drive and by clustering housing, employment, retail, and entertainment uses in one destination. Therefore, it is anticipated that the project itself will not substantially add to the global inventory of greenhouse gas emissions. Nevertheless, greenhouse gas emissions are estimated using procedures similar to those for criteria pollutants.

Carbon Dioxide: The project would generate emissions of carbon dioxide primarily in the form of vehicle exhaust and in the consumption of natural gas for heating from onsite combustion. Carbon dioxide emissions from vehicles were calculated using URBEMIS2007 Version 9.2 assumptions and EMFAC2007 emission factors. Carbon dioxide emissions from natural gas combustion were estimated from guidance as presented in the Climate Leaders Greenhouse Inventory Protocol. The carbon dioxide emissions are shown in Table 4.2-14, which illustrates that at buildout, the project will emit 3.99E-02 Tg CO₂ Eq.

Table 4.2-14: Project Carbon Dioxide Emissions

Emission Source	Carbon Dioxide Emissions
	2010
Vehicles (lbs/day)	224,499
Natural gas combustion (lbs/day)	16,435
Total (metric tons per year)	39,890
Total (Tg CO ₂ Eq.)	3.99E-02
Source: Michael Brandman Associates, 2007.	

Methane: The project would generate some methane gas from vehicle emissions and natural gas combustion. Methane emissions projections from natural gas combustion were generated using guidance as presented in the Climate Leaders Greenhouse Inventory Protocol. Methane emissions from vehicles were estimated using EPA emission factors for on-highway vehicles, and the same assumptions used to estimate criteria pollutants in URBEMIS2007. The emissions are shown in Table 4.2-15, which illustrates that in 2008, emissions would be 3.29E-04 Tg CO₂ Eq.

Table 4.2-15: Project Methane Emissions

Emission Source	Methane Emissions
	2010
Vehicles (lbs/day)	93.41
Natural gas combustion (lbs/day)	1.14
Total (metric tons/year)	15.65
Total (Tg CO ₂ Eq.)	3.29E-04
Source: Michael Brandman Associates, 2007.	

Nitrous Oxide: The project would generate small amounts of nitrous oxide from vehicle emissions. Emissions from natural gas combustion were estimated using guidance as presented in the Climate Leaders Greenhouse Inventory Protocol. Nitrous oxide from vehicles was estimated using EPA emission factors for on-highway vehicles, and the same assumptions that were used to estimate criteria pollutants. The emissions are presented in Table 4.2-16, which illustrates that in 2008, emissions would be 2.36E-03 Tg CO₂ Eq.

Table 4.2-16: Project Nitrous Oxide Emissions

Emission Source	Nitrous Oxide Emissions
	2010
Vehicles (lbs/day)	45.91
Natural gas combustion (lbs/day)	2.28E-02
Total (tons/year)	7.60
Total (Tg CO ₂ Eq.)	2.36E-03
Source: Michael Brandman Associates, 2007.	

Water Vapor: The project does not contribute to this greenhouse gas because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks and not emissions from industrial and commercial activities.

Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors (NO_x and VOC) to global warming.

Chlorofluorocarbons: CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful—so much so that levels of the major CFCs are now remaining level or declining. Because of the ban on chlorofluorocarbons, it is assumed that the project will not generate

a significant amount of emissions of these greenhouse gases, which are not considered any further in this analysis.

In addition, the San Ramon City Code, Division B6, Chapter III, sets strict standards for chlorofluorocarbon-processed food packaging operations and repackaging prohibitions that will also help neutralize any potential increases that may occur.

Hydrofluorocarbons: The project may emit a small amount of HFC emissions from leakage and service of refrigeration and air conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding the refrigerant used and the capacity are unknown at this time.

Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit any of these greenhouse gases.

Inventory Summary: The primary greenhouse gas generated by the project would be carbon dioxide. At buildout, total unmitigated carbon dioxide equivalents would be 4.26E-02 Tg CO₂ Eq., which is 0.00865 percent of California's 2004 emissions (492 Tg CO₂ Eq.) and 0.0502 percent of the Bay Area's 2002 emissions.

Global warming has been recognized as a viable threat to life on earth. The potential health effects from global climate change may be from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and fewer extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects, including malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative human health consequences that include the spreading of disease and death. Global warming may also contribute to air quality problems from increased amounts of smog and particulate air pollution.

It is often the case that mitigations for greenhouse gases are also beneficial to local criteria air pollution reductions. Many greenhouse gas mitigations increase energy efficiency, which would reduce criteria pollutants as well. Several mitigation measures would directly or indirectly contribute to reductions in greenhouse gas emissions. These are listed below:

- **MM AIR-1b:** Requires measures to reduce operational emissions, including display cases or kiosks in prominent areas that provide transportation information; auxiliary power units in dock and delivery areas for trucks to power refrigeration units without idling; clearly marked and shaded pedestrian pathways between transit facilities; adjacent sidewalks and building

entrances; use of cool paving and high-albedo construction materials in roads, driveways, and other paved surfaces to increase reflectivity; use of low nitrogen oxide-emitting or high-efficiency water heaters; and a prohibition on conventional open-hearth fireplaces.

- **MM TRANS-8:** Requires that bicycle storage facilities be provided near the entrances of project buildings.
- **MM US-1a:** Requires that recycled water be used for outdoor irrigation.
- **MM US-1b:** Requires project landscaping to comply with the Model Water Efficient Landscape Ordinance.
- **MM US-1c:** Requires the use of water efficiency measures, including high-efficiency clothes washers and dishwashers, re-circulating hot water systems, high-efficiency or tankless water heaters, green roofs, evapotranspiration-based irrigation controllers, water budgets for landscape irrigation, and high-efficiency toilets in non-residential buildings.
- **MM US-5:** Requires energy efficiency measures, such as natural day lighting through the use of windows and skylights; automated occupancy sensors in structures that automatically shut off lights when rooms are unoccupied; and participation in PG&E energy efficiency rebate programs (e.g., air conditioning, gas heating, refrigeration, and lighting, high-efficiency clothes washers and dishwashing machines, re-circulating hot water systems, and tankless water heaters).

In addition to the measures listed above, additional mitigations are proposed for the proposed project to help serve the dual purpose of reducing criteria and greenhouse gas emissions.

Compliance with Greenhouse Gas Emissions Reduction Strategies

Mitigation of global warming impacts is based on the project's consistency with the strategies proposed in California Environmental Protection Agency Climate Action Team's report. If the project is consistent with those strategies that the Lead Agency deems feasible, then a project could be deemed to have a less than significant impact on global climate change.

The Climate Action Team Report to Governor Arnold Schwarzenegger and the Legislature proposes a path to achieve the Governor's targets that will build on voluntary actions of California businesses, local government and community actions, and State incentive and regulatory programs. The report introduces strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05. This is the best information available at this time; it is unknown when and what will be published in the future.

Table 4.2-17 contains the Climate Action Team strategies that apply to the project. As shown in the table, the project is consistent with all feasible and applicable measures to bring California to the emission reduction targets.

Table 4.2-17: Greenhouse Gas Emission Reduction Strategy Consistency Analysis

Agency	Greenhouse Gas Emission Reduction Strategy	Consistency Analysis
California Air Resources Board (CARB)	Vehicle Climate Change Standards AB 1493 required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light-duty trucks. Regulations were adopted by CARB in September 2004.	Consistent: The vehicles that access the project will be in compliance with any vehicle standards that CARB proposes.
	Diesel Anti-Idling In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Consistent: Mitigation AIR-1b includes provisions intended to prevent idling in loading dock areas.
	Hydrofluorocarbon Reduction (1) Ban retail sale of HFC in small cans; (2) require that only low GWP refrigerants be used in new vehicular systems; (3) adopt specifications for new commercial refrigeration; (4) add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs; (5) enforce federal ban on releasing HFCs.	Consistent: This measure applies to consumer products. When CARB adopts regulations for these reduction measures, any products that the regulations apply to will comply with the measures.
	Transportation Refrigeration Units (TRUs), Off-Road Electrification, Port Electrification Strategies to reduce emissions from TRUs, increase off-road electrification, and increase use of shore-side/port electrification.	Consistent: The project may have TRUs visiting the project site. Mitigation AIR-1b requires that auxiliary power units be provided in loading areas to power TRUs and prevent idling.
	Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	Consistent: These are CARB-enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
	Achieve 50% Statewide Recycling Goal Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989 (AB 939, Sher, Chapter 1095, Statutes of 1989) will reduce climate change emissions associated with energy-intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	Consistent: Mitigation Measures US-4a and US-4b require the proposed project to implement recycling and waste diversion measures during the construction and operation phases, respectively.

Table 4.2-17 (Cont.): Greenhouse Gas Emission Reduction Strategy Consistency Analysis

Agency	Greenhouse Gas Emission Reduction Strategy	Consistency Analysis
Department of Forestry	<p>Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.</p>	<p>Consistent: The proposed project would provide landscaping, including shade trees throughout the site.</p>
Department of Water Resources	<p>Water Use Efficiency Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.</p>	<p>Consistent: The proposed project would incorporate a variety of design features intended to promote sustainability through trip reduction and energy and water conservation. Water conservation measures are designed into the project; including: a recycled water system for landscape irrigation that eliminates the need to use potable water for outdoor watering; re-circulating hot water systems to reduce the need to heat water; tankless hot water heaters that reduce water consumption; green roofs that capture stormwater runoff during the rainy season and keep building interiors cool during warmer months; bioswales that promote percolation of stormwater runoff and reduce the need for pumping stormwater through a conveyance system; evapotranspiration-based water controllers that adjust outdoor irrigation in response to weather conditions; water budgets for landscape irrigation to monitor and regulate outdoor water usage; high-efficiency toilets in non-residential buildings to reduce water usage.</p>
California Energy Commission	<p>Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions and alterations to existing buildings).</p>	<p>Consistent: The proposed project would incorporate a variety of design features intended to promote sustainability through trip reduction and energy and water conservation. Mitigation Measure US-5 requires implementation of the following energy conservation measures: use of glass windows to promote natural day lighting of interior areas to reduce need for lighting, occupancy sensors that automatically shut off lights when rooms are unoccupied, high-efficiency clothes washers and dishwashing machines, re-circulating hot water systems, and tankless water heaters.</p>

Table 4.2-17 (Cont.): Greenhouse Gas Emission Reduction Strategy Consistency Analysis

Agency	Greenhouse Gas Emission Reduction Strategy	Consistency Analysis
<i>cont.</i>	Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Consistent: Mitigation Measure US-5 requires the use of energy-efficient measures, such as occupancy sensors that automatically shut off lights when rooms are unoccupied, high-efficiency clothes washers and dishwashing machines, recirculating hot water systems, and tankless water heaters.
Building, Transportation, and Housing Agency	Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. Governor Schwarzenegger is finalizing a comprehensive, 10-year strategic growth plan with the intent of developing ways to promote, through State investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity, and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, and incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	Consistent: The proposed project is an in-fill mixed-use project designed to be a pedestrian-oriented environment that is also readily accessible for bicycles and public transit. The project is located within walking distance of several major existing activity centers, including the Bishop Ranch Business Park, The Shop at Bishop Ranch, the Market Place, Central Park. The proposed project is located next to the Iron Horse Trail and will have pedestrian/bike connections with the trail at several points. The project includes a Transit Center that would be served by County Connection bus service, including routes serving destinations such as the Dublin/Pleasanton and Walnut Creek BART stations. Mitigation Measure TRANS-8 requires the project applicant to provide bicycle parking near entrances to project buildings. All of these measures are consistent with smart land use and ITS strategies.

Table 4.2-17 (Cont.): Greenhouse Gas Emission Reduction Strategy Consistency Analysis

Agency	Greenhouse Gas Emission Reduction Strategy	Consistency Analysis
<i>cont.</i>	Measures to Improve Transportation Energy Efficiency Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools, and information that advance cleaner transportation and reduce climate change emissions.	Consistent: The proposed project promotes fuel conservation through trip reduction (e.g., developing mixed-uses within walking distance of commercial land uses), the inclusion of a transit center, and pedestrian/bicycle linkages to the Iron Horse Trail, as well as other pedestrian and bicycle facilities.
State Consumer Services Agency	Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, compared with 2003 levels. The Executive Order and related action plan spell out specific actions State agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	Consistent: Mitigation Measure AIR-7 requires the project to comply with, and if possible, exceed the 2005 Title 24 standards. Mitigation Measure US-1a, US-1b, and US-1c require the project to implement several water conservation measures. Mitigation Measure US-5 requires the project to implement energy conservation measures.
Source: Michael Brandman Associates, 2007.		

Summary of Impacts

The proposed project is a large scale, infill, mixed-use project intended to be vibrant cultural and entertainment destination. The project incorporates a number of design features and mitigation measures that are consistent with “smart growth” principles and would reduce greenhouse gas emissions. As a mixed-use project, the proposed project would locate housing adjacent to employment, entertainment, and retail nodes and would create a significant amount of internal capture between its components. Its proximity to the Bishop Ranch Business Park, The Shops at Bishop Ranch, the Market Place, Bishop Ranch 1, Bishop Ranch 3, Central Park, the AT&T campus, and Chevron Park would make walking a convenient and practical mode of transportation for residents, employees, and patrons of the proposed project. The inclusion of a transit center would increase the project’s accessibility to public transportation. The proposed project pedestrian and bicycle linkages with the Iron Horse Trail, and the addition of Class II bicycle lanes on Bishop Drive would enhance the viability of these modes of transportation. As described above, the project would also incorporate energy and water conservation measures intended to reduce consumption of these resources.

After accounting for all of the various sustainability features, the proposed project would still result in a net increase in greenhouse gas emissions. The proposed project is estimated to generate close to 25,000 daily trips, which alone would exceed BAAQMD thresholds for ozone precursors, CO, and particulate matter. When area source emissions are factored, the exceedance would increase to three times BAAQMD thresholds for ozone precursors and particulate matter and four times for CO.

While ozone is considered to have only a localized, short-term impact on greenhouse gas emissions, the Air Basin is in non-attainment for ozone, and the proposed project would incrementally add ozone precursor emissions that would represent a cumulatively considerable contribution. In addition, the proposed project is estimated to emit close to 40,000 metric tons of CO₂ on an annual basis, which would represent a substantial increase over the baseline emissions of CO₂ on the project site. While insignificant by itself, this amount of CO₂ would represent a cumulatively considerable contribution to global concentrations of CO₂.

Moreover, the proposed project would indirectly result in greenhouse gas emissions through energy and water consumption and generation of wastewater and solid waste (Section 4.14, Utility Systems for further discussion). While these activities would be insignificant by themselves, collectively they would represent a cumulatively considerable contribution to greenhouse gas emissions.

In summary, the proposed project is an intensive, large-scale urban development project that would result in a substantial net increase in greenhouse gas emissions. Given its size and intensity, the proposed project's direct and indirect emissions would have a cumulative contribution to greenhouse gas concentrations in the atmosphere. Therefore, this impact would be significant and unavoidable.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM AIR-7** Prior to issuance of occupancy permits, the project applicant shall institute the following greenhouse gas emission reduction features, unless safety or technical feasibility considerations takes precedence:
- Where feasible, project buildings shall include energy-efficient technologies or measures that exceed Title 24 energy efficiency standards or comply with Energy Star home energy standards.
 - Where practicable high-albedo and emissive roofs or Energy Star-approved roofing materials shall be used.
 - Project landscaping shall include trees and shrubs that shed their leaves in winter nearer to these structures to maximize shade to the building during the summer and allow sunlight to strike the building during the winter months.
 - Where possible, HVAC equipment should be shaded from direct sunlight
 - At least 50 percent of project landscaping shall consist of low ozone-forming potential, drought-tolerant trees and shrubs, as listed in East Bay Municipal Utility District's Plants and Landscapes for Summer-Dry Climates or similar landscape reference.

Level of Significance After Mitigation

Significant unavoidable impact.

4.3 - Biological Resources

4.3.1 - Introduction

This section describes the existing biological resources and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Biological Resources Assessment, prepared in June 2007 by Michael Brandman Associates, included in this EIR as Appendix C.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on biological resources were less than significant after mitigation in Section 4.12 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and scoped out the biological resources topical area and its associated issues during the Initial Study/Notice of Preparation process as effects found to be not significant. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.3.2 - Environmental Setting

Project Site Conditions

The project site consists of four parcels and associated roadways totaling approximately 44 acres. The Biological Resources Assessment evaluated an area of 48.6 acres, which included the 44 acres of the project site and 4.6 acres of areas adjacent to the project site that may have biological implications on the proposed project. Below are descriptions of the four parcels constituting the project site.

Parcel 1A

Parcel 1A consists of 14.27 acres of undeveloped land and developed parking areas associated with Bishop Ranch 1. Roughly 7.5 acres of the parcel are undeveloped and surrounded by ornamental landscaping and urban infrastructure (e.g., sidewalks, curbs, gutters, etc.). The balance of the parcel is an at-grade, asphalt paved-surface parking area with landscaped islands.

Parcel 1B

Parcel 1B consists of approximately 3.52 acres of a developed parking area associated with Bishop Ranch 1. Nearly the entire parcel is an at-grade, asphalt paved-surface parking area with landscaped islands. Ornamental landscaping surrounds the parking area.

Parcel 2

Parcel 2 consists of the existing 14.57-acre Bishop Ranch 2 office complex. Bishop Ranch 2 contains 194,652 square feet of office space spread among four, multi-story office structures with an interior turf courtyard landscaped area. Parking areas located around the perimeter of the parcel are characterized as at-grade, asphalt-paved areas with landscaped islands. Ornamental landscaping is present along its frontages with Sunset Drive, Bishop Drive, Camino Ramon, and Bollinger Canyon Road.

Parcel 3A

Parcel 3A is an undeveloped, 11.29-acre, undeveloped City-owned parcel. Ornamental landscaping is present along its frontage with Camino Ramon. The site is used for temporary parking and special events such as car shows and festivals.

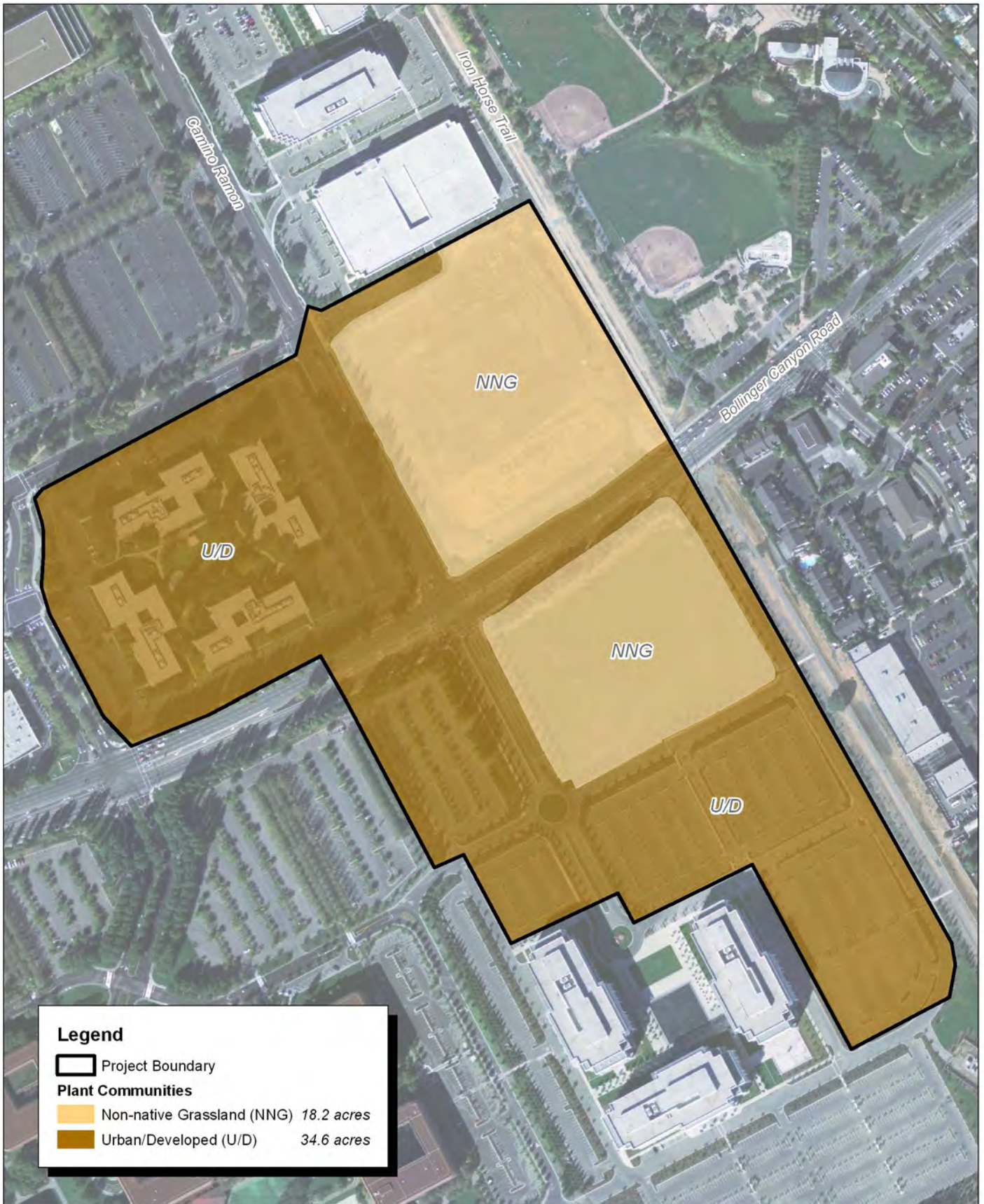
Plant Communities

Two plant communities present on the project site—non-native grassland and urban/developed—are described below. A plant communities map of the project site is provided in Exhibit 4.3-1. Neither of these plant communities is classified as a sensitive natural community by the California Department of Fish and Game (CDFG).

Non-Native Grassland

Non-native grassland, a prevalent community throughout California, is characterized by a dense to sparse cover of non-native, annual grasses often associated with numerous weedy species as well as native annual forbs (wildflowers), especially in years of plentiful rain. Seed germination occurs with the onset of winter rains. Some plant growth occurs in winter, but most growth and flowering occurs in the spring. Plants then die in the summer and persist as seeds in the uppermost layers of soil until the next rainy season. Dominant plant genera typically found within non-native grasslands include bromes (*Bromus* spp.), wild oats (*Avena* spp.), fescues (*Vulpia* spp.), and barleys (*Hordeum* spp.).

Non-native grasslands occur in the eastern portion of the project site, north and south of Bollinger Canyon Road. Highly utilized paved roads surround both grassland areas. The northern portion of the non-native grasslands is dominated by weedy species; however, the perimeter of the site includes a well-maintained lawn on the south and west sides, and a few trees spread out sporadically around the north, south, and west sides.



Source: Terraserver and MBA Field Survey 2007.



Michael Brandman Associates

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Exhibit 4.3-1 Plant Communities Map

Grassland species in the northern section include:

- Bristly ox-tongue (*Picris echioides*)
- Hare barley (*Hordeum murinum*)
- Red-stem filaree (*Erodium cicutarium*)
- Wild oats (*Avena fatua*)

Tree species located around the northern section include:

- Coast live oak (*Quercus agrifolia*)
- Redwood (*Sequoia sempervirens*)

The southern section of the non-native grasslands consists of a well-irrigated and well-maintained grassland. The perimeter of the southern non-native-grassland includes several ornamental shrubs and trees and an irrigated, well-maintained lawn along the northern side. Paved parking lots lie to the south and west of the southern non-native grassland.

Grassland species in the southern section include:

- Ox-eye daisy (*Leucanthemum vulgare*)
- Soft brome (*Bromus hordeaceus*)
- Vetch (*Vicia disperma*)

Tree species located around the southern section include:

- Fremont cottonwood (*Populus fremontii*)
- Redwood (*Sequoia sempervirens*)

Urban/Developed

Although not considered a natural plant community, this habitat often includes a mixture of ornamental vegetation associated with existing structures, roads, residential and commercial buildings, and parking lots. Vegetation within this community typically includes lawns, golf courses, road shoulders, airports, and park facilities, surrounded by or located near residential and commercial development. Many secondary dirt access roads also are included in this category.

The urban/developed area occurs on the northwestern portion of the project site, consisting of several commercial buildings. There are also paved parking lots located in the southeastern and central portions of the project site. Vegetation within the urban/developed area includes ornamental trees such as cottonwoods (*Populus fremontii*) and redwoods (*Sequoia sempervirens*).

Wildlife

The plant communities discussed above provide habitat for a number of local wildlife species including invertebrates, reptiles, birds, and mammals. A few small burrows were observed that suggest the presence of the deer mouse (*Peromyscus maniculatus*), although none were observed. Some of the habitat within the project site provides potential foraging opportunities for raptors, and there are several potential perching locations onsite. No raptors were observed during the survey. In addition, there was no evidence of nesting raptors within the project site, and it is not likely that they would nest onsite because of the proximity to existing commercial development. The project site does not contain suitable habitat for amphibians or fishes. Common wildlife species observed on or near the site include:

- California ground squirrel (*Spermophilus beecheyi*)
- Canada goose (*Branta canadensis*)
- Common raven (*Corvus corax*)
- Mourning dove (*Zenaida macroura*)
- Rock dove (*Columba livia*)

A complete list of plant and wildlife species observed on the project site can be found in Appendix C.

Special Status Species

Special status plant and wildlife species are those designated by federal, State, local, or scientific organizations as needing protection because of rarity or threats to their existence. Special status plant and wildlife species include those listed as threatened, endangered, or proposed for listing; candidates for listing; and species of concern to the U.S. Fish and Wildlife Service (USFWS) and CDFG. The burrowing owl is the only special status species with moderate potential to occur onsite. Its characteristics are summarized in Table 4.3-1.

Table 4.3-1: Special Status Wildlife Species

Species	Habitat	Status	Occurrence in Project Area
Burrowing owl (<i>Athene cunicularia</i>)	Burrow sites - open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	California Species of Concern	Moderate Potential to Occur: Documented occurrence on the site. Marginally suitable habitat, highly disturbed. California ground squirrel burrows were observed on the site.
Source: Michael Brandman Associates. June 2007.			

Burrowing Owl

Typical habitat associated with burrowing owls includes short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some

artificial, open areas as a year-round resident. The primary requirement for suitable burrowing owl foraging habitat appears to be low vegetation cover that allows visibility and access to prey.

Kleinfelder, Inc. prepared a non-protocol survey for the burrowing owl on Parcel 3A, dated May 18, 2007. The area surveyed included 12 acres on and adjacent to Parcel 3A. The survey was performed prior to the start of the summer festival season, during which the parcel would be used for various events that would result in intensive use of the site. No owls or signs of owls were observed during this survey. The survey is available in Appendix C of this DSEIR.

Typically, burrowing owl requires approximately 6.5 acres to support a pair of nesting owls. The project site contains non-native grassland and California ground squirrel burrows that provide marginally suitable habitat for burrowing owl. The non-native grassland associated with the project site is considered isolated from adjacent habitat; however, a recent occurrence was recorded in 2004 within the boundaries of the project site. Therefore, burrowing owl has a moderate potential to occur onsite.

Wildlife Movement Corridors

The project site is located in an urban, built-up area and is surrounded by residential and commercial development. Interstate 680 (I-680) is located approximately 0.25 mile west of the project site and serves as a physical barrier to wildlife movement between the hills on the west side of San Ramon and Dougherty Hills on the east side. The project site does not contain any physical features commonly associated with wildlife movement (e.g., riparian corridors, arroyos, ridgelines). Watson Canyon Drainage, a man-made drainage channel, is located east of Parcel 3A. Its viability as a substantial wildlife movement corridor is limited because it is culverted from Bollinger Canyon Road to South San Ramon Creek.

Jurisdictional Waters and Wetlands

The four parcels that constitute the project site do not contain any blue-line streams shown on topographical maps. Parcel 1B, Parcel 2, and a portion of Parcel 1A are built up and covered with impervious surfaces. This condition precludes the presence of jurisdictional waters or wetlands. Parcel 3A and the remaining portion of Parcel 1A are undeveloped. Site reconnaissance of both parcels found that there are no jurisdictional features on either site.

Watson Canyon Drainage is located east of Parcel 3A within Central Park on the east side of the Iron Horse Trail corridor. Runoff from Parcel 3A does not enter the drainage because the raised rail bed within the Iron Horse Trail corridor acts as an obstruction to an eastward drainage gradient.

4.3.3 - Regulatory Framework

Federal

Endangered Species Act

The Endangered Species Act (ESA) of 1973 establishes a framework for protecting and facilitating the recovery of threatened and endangered populations of animal and plant species. Under the ESA, the Secretary of the Interior is required to list species of animals and plants that are both threatened and endangered, a task that is delegated to the USFWS and the National Marine Fisheries Service (NMFS). A species can become threatened or endangered as a result of the following factors:

- Present or threatened destruction
- Modification or curtailment of its habitat range
- Over-utilization for commercial recreation, scientific, or educational purposes
- Disease or predation
- Inadequacy of existing statutory mechanisms
- Other natural or man-made factors affecting its continued existence

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

Section 7 of the ESA requires that federal agencies ensure that their actions are not likely to jeopardize the continued existence of a listed species, or destroy or adversely modify its critical habitat. This obligation requires federal agencies to consult with the USFWS or the NMFS on any actions (issuing permits including Section 404 permits, issuing licenses, providing federal funding) that may affect listed species to ensure that reasonable and prudent measures will be undertaken to mitigate impacts on listed species. Consultation with USFWS or NMFS can be either formal or informal, depending on the likelihood of the action to adversely affect listed species or critical habitat.

Once a formal consultation is initiated, USFWS or NMFS will issue a Biological Opinion (either a “jeopardy” or a “no jeopardy” opinion) indicating whether the proposed agency action will or will not jeopardize the continued existence of a listed species or result in the destruction or modification of its critical habitat. A permit cannot be issued for a project with a “jeopardy” opinion unless the project is redesigned to lessen impacts.

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

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) makes it unlawful to “take” (kill, harm, harass, etc.) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species, and it was originally drafted to put an end to the commercial trade in birds and their feathers that, by the early years of the 20th century, had wreaked havoc on the populations of many native bird species. The MBTA implements the United States’ commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protect selected species of birds that are common to both countries (i.e., they occur in both countries at some point during their annual life cycle). The MBTA requires that the removal of any trees, shrubs, or any other potential nesting habitat be conducted outside the avian nesting season, which is generally between early February and late August.

State

California Endangered Species Act

Signed into law in 1984, the California Endangered Species Act (CESA) declares that deserving plant or animal species will be given protection by the State because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. The CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats. Under State law, the California Fish and Game Commission may formally designate plant and animal species rare, threatened, or endangered by official listing. Listed species are generally given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed.

CESA prohibits the “take” of any species that the California Fish and Game Commission determines to be an endangered species or a threatened species. CESA defines a “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CDFG enforces CESA, which authorizes that take of a plant or wildlife species listed as endangered or threatened under ESA and

CESA, may occur pursuant to a federal incidental take permit issued in accordance with Section 10 of the ESA, provided CDFG is notified and certifies that the incidental take statement or incidental take permit is consistent with CESA (Fish & Game Code Section 2080.1(a)).

CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species populations and their essential habitats.

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

Both the federal and State Endangered Species Acts protect only those species formally listed as threatened or endangered (or rare, in the case of the State list). CEQA Guidelines Section 15380, however, independently defines “endangered” species of plants, fish or wildlife as those whose survival and reproduction in the wild are in immediate jeopardy, and “rare” species as those which are in such low numbers that they could become endangered if their environment worsens. Therefore, a project will normally have a significant effect on the environment if it will substantially affect a rare or endangered species or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

California Fish and Game Code

Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the “take, possession, or destruction of birds, their nests or eggs.” Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a “take.”

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following applicable policies related to biological resources:

- **Policy 8.3-I-3:** Preserve as open space significant creek, trail, and viewshed corridors, areas of riparian and wildlife habitat, and prominent topographic features.
- **Policy 8.3-I-8:** Encourage public access to creek corridors with a system of trails.
- **Policy 8.3-I-12:** Continue participation in the Contra Costa Clean Water Program to control stormwater pollution and protect the quality of the City’s waterways.

San Ramon City Code

San Ramon City Code Division C4 Chapter III sets forth tree preservation regulations for land development projects. The chapter requires that permits be obtained for the removal of any tree 30 inches or greater in circumference. Exceptions from the permitting requirements are allowed for tree removal associated with City-approved development plans, subdivision maps, or grading permits.

4.3.4 - Methodology

Michael Brandman Associates (MBA) prepared a Biological Resources Assessment for the proposed project. The assessment consisted of a literature review and a reconnaissance-level field survey.

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site as well as in the surrounding area. A compilation of sensitive plant and wildlife species recorded in the vicinity of the site was derived from the CDFG California Natural Diversity Database (CNDDDB), a sensitive species and plant community account database. Additional recorded occurrences of plant species found on or near the site were obtained in the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDDB and CNPS searches were based on the Diablo, California and surrounding United States Geological Survey (USGS) 7.5-minute topographic quadrangles. Federal register listings, protocols, and species data provided by the USFWS and CDFG were reviewed in conjunction with anticipated federal and State listed species potentially occurring in the vicinity.

An MBA staff biologist conducted reconnaissance-level field surveys on April 17, 2007. The reconnaissance-level survey was conducted on foot during daylight hours. The object of the survey was not to extensively search for every species occurring within the project site, but to ascertain general site conditions and identify potentially suitable habitat areas for various sensitive plant and wildlife species.

Plant communities were mapped using 7.5-minute USGS topographic base maps and recent aerial photography (circa 2005). Plant communities within the project site were classified at a general level of detail using the widely accepted descriptions provided in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986 and 1996 update), and modifications were made by MBA biologists where appropriate.

4.3.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- b.) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

- c.) 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?
- d.) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?
- e.) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f.) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Refer to Section 7, Effects Found Not To Be Significant.)

4.3.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Special Status Species

Impact BIO-1: Special status wildlife species may be adversely affected by project construction activities.

Impact Analysis

Portions of the project site contain suitable habitat for burrowing owl and nesting birds. Each special status species is discussed below.

Burrowing Owl

Parcels 1A and 3A contain undeveloped land suitable for the burrowing owl, a California Species of Special Concern. Project construction activities would include vegetation removal, grading, and building activities that could result in adverse effects on burrowing owl nests if such features are present. The burrowing owl had been recorded on the project site in 2004, although habitat onsite is considered isolated from adjacent burrowing owl habitat, which reduces the potential for occurrence of the species. Kleinfelder, Inc. conducted a non-protocol survey for the burrowing owl on Parcel 3A in May 2007 and found no evidence of owls or owl nests onsite.

Although no burrowing owls were observed during the May 2007 survey, Parcels 1A and 3A contain suitable habitat for the burrowing owl, and there is the possibility that nests may be established prior to project construction. Therefore, mitigation is proposed that would require a pre-construction survey for the burrowing owl to be performed prior to any ground-disturbing activities. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant.

Nesting Birds

All four parcels contain large, mature trees suitable for nesting birds protected by the MBTA. Project construction activities would include the removal of many, if not all, of these trees and, therefore, could result in adverse impacts to nesting birds if nests are present. Mitigation is proposed that would require a pre-construction nesting bird survey to be performed prior to any vegetation removal during the nesting season, generally the period between February 1 and August 31. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant. Vegetation removal that would occur outside of the nesting season, generally the period between September 1 and January 31, would not require mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Prior to any ground disturbance activities on Parcel 3A or the undeveloped portion of Parcel 1A, a qualified biologist shall conduct a focused survey to determine the presence or absence of burrowing owls onsite. The survey shall be conducted according to the standard protocol established by CDFG and the Burrowing Owl Consortium (BOC). If burrowing owls are determined to be present on the site, mitigation for potential impacts to owls shall follow the guidelines outlined by the BOC, including passive relocation. If vegetation removal or ground disturbance begins within 30 days of the focused survey, no pre-construction survey would be required. If vegetation removal or ground disturbance activities begin after 30 days of the focused survey, a pre-construction survey would be required to be performed no earlier than 30 days prior to vegetation removal or ground disturbance.

MM BIO-1b If suitable avian nesting habitat is intended to be removed during the nesting season (February 1 through August 31), a qualified biologist shall conduct a nesting bird survey to identify any potential nesting activity. If passerine birds are found to be nesting, or there is evidence of nesting behavior within 250 feet of the impact area, the biologist shall determine an appropriate buffer that shall be required around the nests. No vegetation removal or ground disturbance would occur within this buffer. For raptor species—birds of prey (e.g., hawks and owls)—this buffer would generally be 500 feet. A qualified biologist shall monitor the nests closely until it is determined that the nests are no longer active, at which time construction activities may commence within the buffer area. Construction activity may encroach into the buffer area at the discretion of the biological monitor.

Level of Significance After Mitigation

Less than significant impact.

Riparian Habitat and Sensitive Natural Communities

Impact BIO-2: The proposed project would not adversely affect riparian habitat or sensitive natural communities.

Impact Analysis

No riparian habitat or sensitive natural communities are present on any of the four parcels comprising the project site. Watson Canyon Drainage is located east of Parcel 3A on the east side of the Iron Horse Trail. Runoff from Parcel 3A does not enter the drainage, because the raised rail bed within the Iron Horse Trail Corridor acts as an obstruction to an eastward drainage gradient. The nearest construction activities to the drainage would occur at a distance of approximately 30 feet and would consist of half-width improvements associated with the extension of Bishop Drive along the west side of the Iron Horse Trail corridor. Half-width improvements would consist of the installation of curb, gutter, fencing, landscaping, and a pedestrian connection with the trail; no construction would occur in or near the drainage channel. In addition, the proposed project would implement stormwater pollution controls during construction and operations to prevent the release of pollutants into downstream waterways, including South San Ramon Creek. (Refer to Section 4.7, Hydrology and Water Quality for further discussion.) Therefore, Watson Canyon Drainage and other riparian corridors would not be adversely affected by the proposed project. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Wetlands

Impact BIO-3: The proposed project would not adversely affect wetlands.

Impact Analysis

There are no potentially jurisdictional waters or wetlands on the four parcels comprising the project site. The nearest jurisdictional feature is Watson Canyon Drainage, located east of Parcel 3A. As discussed in Impact BIO-2, project construction activities would not occur in or near the drainage channel; therefore, the proposed project would not have any adverse impacts on jurisdictional waters or wetlands. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Wildlife Movement

Impact BIO-4: Development of the proposed project would not result in adverse impacts to wildlife movement.

Impact Analysis

The project site is located in an existing urbanized area and does not contain any features that facilitate aquatic or terrestrial wildlife movement (e.g., arroyos, riparian corridors, ridgelines, etc.). The nearest wildlife movement corridor to the project site is Watson Canyon Drainage, located east of Parcel 3A. As discussed in Impacts BIO-2 and BIO-3, project construction activities would not occur in or near the drainage channel; therefore, the proposed project would not adversely impact wildlife movement in the drainage. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Local Biological Policies or Ordinances

Impact BIO-5: The proposed project would not conflict with local policies or ordinances related to the protection of biological resources.

Impact Analysis

The City of San Ramon General Plan and the City Code contain several policies related to protection of biological resources. Each is discussed below.

General Plan Policy 8.3-I-3 calls for the protection of significant creek corridors and riparian areas, and General Plan Policy 8.3-I-8 encourages public access to creek corridors. As discussed in Impacts BIO-2, BIO-3, and BIO-4, the proposed project would not adversely impact the Watson Canyon Drainage channel or limit access to the drainage. Therefore, the proposed project is consistent with these policies.

Policy 8.3-I-12 stipulates that the City shall continue to participate in the Contra Costa Clean Water Program to control stormwater pollution and protect the quality of the City's waterways. The proposed project would not adversely impact Watson Canyon Drainage. In addition, the proposed

project would implement stormwater pollution controls during construction and operations to prevent the release of pollutants into local waterways, consistent with the policies of the Contra Costa Clean Water Program. Therefore, the proposed project is consistent with this policy.

San Ramon City Code Division C4 Chapter III requires that permits be obtained for the removal of any tree that are 30 inches or greater in circumference. The Code exempts City-approved development plans, subdivision maps, or grading permits from the provisions of this policy. The proposed project would be considered a City-approved development plan and, therefore, would be granted an exemption from this policy. Therefore, the proposed project is consistent with this policy.

In summary, the proposed project would be consistent with all applicable General Plan and City Code policies related to biological resources. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

4.4 - Cultural Resources

4.4.1 - Introduction

This section describes the existing cultural resources and potential effects from project implementation on the site and its surrounding area that are based on a Phase I Cultural Resource Assessment performed by Michael Brandman Associates. The results of the assessment are presented entirely in this section.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on cultural resources were less than significant after mitigation in Section 4.14 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and scoped out the cultural resources topical area and its associated issues during the Initial Study/Notice of Preparation process as effects found not to be significant. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIR and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.4.2 - Environmental Setting

Overview

The term “cultural resources” encompasses historic, archaeological, and paleontological resources, and burial sites. Below is a brief summary of each component:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State’s history and are generally less than 200 years old.
- **Archaeological Resources:** Archaeology is the study of prehistoric human activities and cultures. Archaeological resources are generally associated with indigenous cultures.
- **Paleontological Resources:** Paleontology is the study of plant and animal fossils.
- **Burial Sites:** Burial sites are formal or informal locations where human remains, usually associated with indigenous cultures, are interred.

Regional Cultural Setting

Prehistory

The Prehistoric period is classified into three temporal ranges: the Early Horizon (3000 to 1000 B.C.), the Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500), and the Augustine Pattern or Late Horizon (A.D. 500 to historic period). Brief descriptions of these temporal ranges and their unique characteristics follow.

Early Horizon

Characterized by the Windmill Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but little obsidian. The large variety of projectile point types and faunal remains suggest hunting of numerous types of terrestrial and aquatic species. Burials occurred in cemeteries and intra-village graves, and they typically were ventrally extended, although some dorsal extensions are known, with westerly orientation, and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than in raw material form. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicate an extensive trade network that possibly represents the arrival of Utian populations into central California. Also indicative of this period are rectangular *Haliotis* and *Olivella* shell beads, and usually perforated charm stones.

Middle Horizon

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Research suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements during the Middle Horizon, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. The practice of spreading ground ochre over the burial was common at this time. Grave goods are sparse and typically included only utilitarian items and a few ornamental objects. However, objects such as charm stones, quartz crystals, and bone whistles occasionally occur, suggesting the religious or ceremonial significance of the individual. Larger populations are suggested by the number and depth of sites compared with the Windmill Pattern. It is believed that the Berkeley Pattern reflects gradual expansion or assimilation of different populations as well as a gradual shift in economic emphasis, rather than sudden population replacement.

Late Horizon

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in general subsistence patterns. Changes include the introduction of bow and arrow technology and, most importantly, acorns as the predominant food resource. Trade systems expanded and included raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was less use of ochre; evidence of cremation was widespread. Judging from the number and types of grave goods associated with the two types of burials, cremation seemed to have been reserved for individuals of higher status, whereas others were buried in flexed positions. Research suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Middle Horizon.

Ethnography

At the time of European contact in the 18th century, the San Ramon area was occupied by the Ohlone tribe of California Native Americans. The Ohlone group designates a linguistic family consisting of eight different yet related languages. The eight Ohlone languages were quite different from one another, with each language being related to its geographically contiguous neighbors.

The arrival of Ohlone groups into the Bay Area appears to be temporally consistent with the appearance of the Late Period artifact assemblage in the archaeological record, as documented at sites such as the Emeryville Shellmound or the Ellis Landing Shellmound. It is probable that the Ohlone moved south and west from the delta region of the San Joaquin-Sacramento River region into the Bay Area. The tribal group that most likely occupied the project area is the Chochenyo language group, whose territory extended from the southern end of the Carquinez Strait south to Mission San Jose (present-day Fremont), east to present-day Livermore and west to the San Francisco Bay.

The various Ohlone tribes subsisted as hunter-gatherers and relied on local terrestrial and marine flora and fauna for subsistence. The predominant plant food source was the acorn, but they also exploited a wide range of other plants, including various seeds, buckeye, berries, and roots. Protein sources included grizzly bear, elk, sea lions, antelope, and black-tailed deer as well as smaller mammals such as raccoon, brush rabbit, ground squirrels, and wood rats. Waterfowl, including Canadian geese, mallards, green-winged teal, and American widgeon, were captured in nets using decoys to attract them. Fish also played an important role in the Chochenyo diet and included steelhead, salmon, and sturgeon.

The Ohlone constructed watercraft from tule reeds and possessed bow and arrow technology. They fashioned blankets from sea otter pelts, fabricated basketry from twined reeds of various types, and assembled a variety of stone and bone tools in their assemblages. Ohlone villages typically consisted of domed dwelling structures, communal sweathouses, dance enclosures, and assembly houses constructed from thatched tule reeds and a combination of wild grasses, wild alfalfa, and ferns.

The Ohlone were politically organized into autonomous tribelets that had distinct cultural territories. Individual tribelets contained one or more villages with a number of seasonal camps for resource procurement within the tribelet territory. The tribelet chief could be either male or female, and the position was inherited patrilineally, but approval of the community was required. The tribelet chief and council were essentially advisors to the community and were responsible for feeding visitors, directing hunting and fishing expeditions, ceremonial activities, and warfare on neighboring tribelets.

The first European contact with the Ohlone was probably in 1602, when Sebastian Vizcaíno's expedition moored in Monterey. The estimated Ohlone population in 1770—when the first mission was established in Ohlone territory—was approximately 10,000. By 1832, the population had declined to fewer than 2,000, mainly due to diseases introduced by the European explorers and settlers. When the Spanish mission system rapidly expanded across California, the Ohlone traditional way of life was irreversibly altered. The pre-contact hunter-gatherer subsistence economy was replaced by an agricultural economy, and the Spanish missionaries prohibited traditional social activities.

The Gold Rush brought further disease to the native inhabitants, and by the 1850s, nearly all of the Ohlone had adapted in some way or another to economies based on cash income. Hunting and gathering activities continued to decline and were rapidly replaced with economies based on ranching and farming.

Historic Era

Spanish and Mexican Exploration and Settlement

Spanish exploration into the Central Valley dates back to the late 1700s, and Spanish mission records indicate that local Native American inhabitants were being taken to Mission San Jose until secularization of the missions in 1833. Many Native Americans were not willing converts, and there are numerous accounts of neophytes fleeing the missions and a series of “Indian Wars” broke out when the Spanish tried to return them to the missions. During this period, Native American populations were declining rapidly from an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company, led by John Work, traveled down the Sacramento River unintentionally spreading a malaria epidemic to Native Californians.

The Mexican revolt against Spain in 1822 and the secularization of the missions in 1834 changed land ownership patterns in California. The Spanish philosophy of government was directed at the founding of presidios, missions, and secular towns with the land held by the Crown, whereas the later Mexican policy stressed individual ownership of the land. Following Mexico's independence from Spain in 1822, the vast mission lands were granted to private citizens. The last of the mission land holdings were relinquished in 1845, which led the way for the large ranchos common to California in the mid-1800s.

Mission San Jose was one of the most prosperous missions in California because of its fertile land, excellent water supply, large numbers of Native American laborers, and its proximity to San Francisco Bay. In 1824, when a map was drawn of the Mission San Jose territory, it included the San Ramon Valley, which at that time was called “Yngerto Canada,” its original Spanish name.

During the Mexican Period, vast tracts of land, including former Mission lands that had reverted to public domain, were granted to individuals. The San Ramon Valley contained three large ranchos: San Ramon (Amador), 16,517 acres; San Ramon (Carpentier), 8,917 acres; and San Ramon (Norris), 4,451 acres. The project site is within the San Ramon (Norris) rancho.

American Period

Following the end of the Mexican-American War in 1847 and the ratification of the Treaty of Guadalupe in Hidalgo in 1848, California became a United States territory. California was formally admitted into the Union in 1850. Contra Costa County was one of the original 27 counties created at the time of statehood by the California legislature and included portions of present-day Alameda and Santa Clara counties. The county was originally named Mt. Diablo County, but the name was changed prior to incorporation to Contra Costa (Spanish for “opposite coast”), reflecting its geographical relationship to San Francisco.

The Gold Rush of 1848 brought a massive influx of immigrants to California from all parts of the world. California’s 1848 population of less than 14,000 (exclusive of Native Americans) increased to 224,000 in four years. With the beginning of the American period, the population explosion resulting from the Gold Rush created a market for a wide range of agricultural products. As more and more gold seekers became discouraged with mining, they turned to farming as a livelihood. Farmers started to raise crops and livestock for sale, not just to be self-sufficient.

The population of the Contra Costa County increased rapidly during the Gold Rush and, later, by the completion of Western Pacific Railroad between Stockton and Niles Junction in 1869 and the Santa Fe Railroad between Stockton and Richmond in 1896. The great rancheros of the Spanish period were divided and sold for agricultural uses, with intensively irrigated farming made possible in some areas of the County by the development of canals that brought water from the eastern portions of the County to the central portions. Other areas, such as nearby Livermore Valley, used the more limited water available from local creeks and wells. Orchards dominated where abundant water was available, while seasonally dry areas were used for dry farming and cattle ranching. Walnuts were an especially attractive orchard crop in central portions of the County, with farmers using thin-shelled English walnut branches grafted to hardy and disease-resistant American walnut rootstock.

The first settlers to the San Ramon area were Leo and Mary Norris, who purchased 4,450 acres of land in 1850. Other early settlers included names that are recognizable from local street names, such as Crow, Bollinger, and Glass. The first village developed on the site of the present-day Outpost Casino at the intersection of Deerwood Road and San Ramon Valley Boulevard. San Ramon was

known by a series of names in the nineteenth century: Brevensville, for a local blacksmith; Lynchville, for the early settler William Lynch; and Limerick, for the numerous Irish immigrants.

The Southern Pacific Railroad arrived in the San Ramon Valley in the 1890s. Dubbed the San Ramon Branch Line, the single-track line originally extended from a junction with the Oakland-Stockton main line near Martinez south to San Ramon, a distance of approximately 20 miles. Service commenced in June 1891. In 1909, the southern terminus of the San Ramon Branch Line was extended south to a junction with the Lathrop-Niles Junction main line near Pleasanton. San Ramon was served with a station, known as San Ramon Siding, near the present-day Iron Horse Trail crossing at Crow Canyon Road. By the mid-1970s, traffic on the line had dwindled to 125 carloads annually and the Southern Pacific Railroad petitioned the Interstate Commerce Commission to abandon the branch line. The line was formally abandoned in 1978 and the counties of Alameda and Contra Costa acquired ownership of the right-of-way within their respective jurisdictions. The Iron Horse Trail, a 24.47-mile Class I bicycle/pedestrian trail, follows the alignment of the San Ramon Branch Line from Pleasanton to Concord.

Twentieth Century

The San Ramon Valley remained primarily an agricultural area up through the early 1960s. Following the completion of Interstate 680 (I-680) through the San Ramon Valley in the mid-1960s, the San Ramon area experienced rapid growth. The first residential subdivisions were developed in South San Ramon (a.k.a. San Ramon Village) and Twin Creeks. In the early 1980s, Sunset Development began developing the Bishop Ranch Business Park. The most notable facilities in the Bishop Ranch Business Park are Chevron Park and the AT&T campus (formerly known as the Pacific Bell campus), both of which opened in the mid-1980s. Sunset Development continued to develop the Bishop Ranch Business Park through the 1980s and 1990s, with the newest complex, Bishop Ranch 1, opening in 2001.

With growth came the desire for greater control over land use and development. In March 1983, the City electorate voted to incorporate and the City of San Ramon came into existence on July 1 of that year. Since incorporation, the City has expanded its limits west to include the Westside Drive area and portions of Norris Canyon, north to include the Crow Canyon area, and east to include the Dougherty Hills and Dougherty Valley.

Project Site

Parcel 1A

Parcel 1A consists of 14.27 acres of undeveloped land and developed parking areas associated with Bishop Ranch 1. Record search results from both the Northwest Information Center (NWIC) and Native American Heritage Commission (NAHC) were negative for this parcel. No prehistoric resources were observed during the pedestrian survey, and the parking areas and sidewalks are of such recent construction that they do not meet the minimum age criteria (50 years old) for listing on the California Register of Historical Resources (CRHR).

Parcel 1B

Parcel 1B consists of approximately 3.52 acres of a developed parking area associated with Bishop Ranch 1. Record search results from both the NWIC and NAHC were negative for this parcel. No prehistoric resources were observed during the pedestrian survey, and the parking areas and sidewalks are of such recent construction that they do not meet the minimum age criteria for listing on the CRHR.

Parcel 2

Parcel 2 consists of the existing 14.57-acre Bishop Ranch 2 office complex. Record search results from both the NWIC and NAHC were negative for this parcel. No prehistoric resources were observed during the pedestrian survey. Since construction for Bishop Ranch 2 was initiated in 1982, neither the buildings nor the associated parking areas and sidewalks meet the minimum age criteria for listing on the CRHR.

Parcel 3A

Parcel 3A is an undeveloped, 11.29-acre, City-owned parcel containing ruderal vegetation. Record search results from both the NWIC and NAHC were negative for this parcel. No historic resources were observed during the pedestrian survey.

4.4.3 - Regulatory Framework

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA), as amended, requires federal agencies to consider the effects of proposed federal undertakings on historic properties. NHPA's implementing regulations require federal agencies (and their designees, permittees, licensees, or grantees) to initiate consultation with the State Historic Preservation Officer (SHPO) as part of the Section 106 review process.

State

State Historic Preservation Programs

The State Office of Historic Preservation oversees four historic preservation programs:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CR)
- California Historical Landmarks
- California Points of Historic Interest

Each program has its own specific eligibility criteria, though historic resources often overlap on multiple lists.

Resources listed in the National Register and California Historical Landmarks #770 and above are automatically listed in the California Register (CR). Points of Historical Interest designated after

December 1997 and recommended by the State Historical Resources Commission are also listed in the CR.

As of October 2004, there were 1,041 California Historical Landmarks, 766 Points of Historical Interest, 2138 National Register listings, and more than 25,000 resources listed in the CR.

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following relevant policy related to cultural resources:

- **Policy 8.8-I-1:** Require that new development analyze, and therefore avoid any potential impacts to archaeological, paleontological, and historic resources.

4.4.4 - Methodology

Michael Brandman Associates prepared a Phase I Cultural Resources Assessment for the project site that included records searches and a field survey, the details of which are described below.

Record Searches

On April 13, 2007, an archival records search was conducted at the NWIC at Sonoma State University in Rohnert Park, California (NWIC File No. 06-1607). The record search included the project area and a 0.25-mile radius outside the project area boundaries. The record search included current inventories of the NRHP, the CR, California Historical Landmarks, California Points of Historical Interest, and the California Inventory of Historical Resources (CIHR). In addition, the Directory of Properties in the Historic Property Data File was reviewed to determine the existence of previously documented local historical resources. Four historic maps—an 1866 Government Land Office plat map; an 1859 Rancho San Ramon (Norris) plat map; an 1896 United States Geological Survey Mt. Diablo quadrangle map; and a 1943 U.S. Army Corps of Engineers, Mt. Diablo Quadrangle, Grid Zone “G”—were examined to help locate any historic resources in the area.

The record search indicated that no surveys have been conducted within the project area. Two studies have been conducted adjacent to the project area (S-727 and S-5001) and four studies (S-5749, S-229, S-6264, and S-28819) have been conducted within 0.25 mile of the project area.

No sites, features, or isolates have been recorded within a 0.25-mile radius of the project area. In addition, no resources are listed on the NRHP, the CR, or local directories within the record search radius.

On April 18, 2007, MBA requested a record search of the NAHC Sacred Lands File to determine if there were Native American cultural resources within the immediate project area and to obtain a list of Native American tribal entities that may have concerns about project development.

On April 26, 2007, a response was received from the NAHC stating that the record search failed to indicate the presence of Native American cultural resources within the immediate project area. A list of three Native Americans that may have additional information about the project area was received. Letters were sent to each of these tribal representatives on May 14, 2007. As of June 22, 2007, no responses have been received by MBA from any of the tribal representatives.

On May 10, 2007, MBA requested a paleontological records search for the project area from Dr. Kenneth L. Finger. A response was received on May 14, 2007, indicating that during the Pleistocene Epoch (10,000–1.8 million years ago), the San Ramon Valley area was riparian woodland with a tidal inlet connected to San Francisco Bay. Contra Costa County lists 62 vertebrate fossil localities and 2,341 vertebrate specimens, including several in the San Ramon Valley area.

The paleontological response indicated that earth-disturbing construction activities for the proposed project could impact significant paleontological resources if excavation activities penetrate the soil veneer. It was determined that an onsite paleontological survey for the project site was not necessary prior to initiation of construction activities. However, prior to initiation of deep excavation procedures (greater than 10 feet), such as sewer line trenching, a qualified paleontological monitor will be retained to conduct an onsite monitoring program, to ensure that any newly discovered paleontological resources are professionally assessed and, if determined significant, properly salvaged. Following recovery, the specimens would be curated at an accredited scientific institution, such as the University of California Museum of Paleontology.

Pedestrian Survey

A pedestrian survey of the project area consisting of a series of transects across the site was conducted on May 10, 2007. The project area consists of level ground interspersed with paved roads, a parking lot area, various office buildings, and undeveloped land. The field survey included all visible ground surface and was conducted utilizing transects of 10 meters or less, depending on vegetation, roads, and other obstructions. The typical ground surface consisted of grass or short weeds as well as the paved areas such as roads, parking lots, and buildings.

The primary areas with open ground surface were on the north and south sides of Bollinger Canyon Road between Camino Ramon and the Iron Horse Trail. The remainder of the project area was covered with surface parking, roads, landscape elements, and the office buildings of Bishop Ranch 1 and 2. The buildings on the project site were constructed in 1982 (Bishop Ranch 2) and 2001 (Bishop Ranch 1), and, therefore, do not meet the minimum age requirement of 50 years old to be considered for eligibility for listing on the NRHP or the CR.

No historic or prehistoric resources were discovered during the pedestrian survey of the project area.

4.4.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to cultural resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?
- b.) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c.) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d.) Disturb any human remains, including those interred outside of formal cemeteries?

4.4.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-1: Subsurface construction activities associated with the proposed project have the potential to damage or destroy previously undiscovered historic resources.

Impact Analysis

No recorded historic resources have been recorded within the project site, nor were any encountered during the field survey. However, subsurface construction activities associated with the proposed project, such as trenching and grading, could potentially damage or destroy previously undiscovered historic resources. Accordingly, this is a potentially significant impact. Mitigation is proposed to reduce this potentially significant impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1 If a potentially significant historic resource is encountered during subsurface activities, all construction within a 100-foot radius of the find shall cease until a qualified archaeologist determines whether the resource requires further study. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist.

Potentially significant cultural resources consist of, but are not limited to, glass, ceramics, stone, bone, wood, and shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, a qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan, if necessary. The archaeologist shall also perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center, and provide for permanent curation of the recovered resources.

Level of Significance After Mitigation

Less than significant impact.

Archaeological Resources

Impact CUL-2: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered archaeological resources.

Impact Analysis

No previously recorded archaeological resources are present within the project site, nor were any discovered during the field survey. However, subsurface excavation activities associated with the proposed project, such as trenching and grading, could potentially damage or destroy previously unknown archaeological resources. This is a potentially significant impact. Mitigation is proposed to reduce this potentially significant impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Refer to Mitigation Measure CUL-1.

Level of Significance After Mitigation

Less than significant impact.

Paleontological Resources

Impact CUL-3: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered paleontological resources.

Impact Analysis

No recorded paleontological resources are known to be present within the project site, nor were any encountered during the field survey. However, the project area was a lowland of riparian woodlands and grassy plains during the Pleistocene Epoch and could contain significant vertebrate fossils. Vertebrate fossils from these sediments may include, but are not limited to, mammoth, mastodon, tapir, horse, camel, pronghorn sheep, elk, rodents, birds, and reptiles. As such, subsurface construction activities associated with deep trenching or excavation could potentially damage or

destroy previously undiscovered paleontological resources. This is a potentially significant impact. Mitigation is proposed to reduce this potentially significant impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 Prior to initiation of deep excavation procedures at depths greater than 10 feet, a qualified paleontological monitor will be retained to conduct an onsite monitoring program to ensure protection of previously unknown paleontological specimens. In the event a fossil is discovered during construction of the proposed project when the paleontological monitor is not present, excavation within 100 feet of the find shall be temporarily halted until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the City and project applicant of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the City determines that avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be submitted to the City for review and approval. Upon approval, the plan shall be incorporated into the project.

Level of Significance After Mitigation

Less than significant impact.

Burial Sites

Impact CUL-4: Subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered burial sites.

Impact Analysis

Subsurface construction activities associated with project development such as trenching and grading could potentially damage or destroy previously undiscovered burial sites. This is a potentially significant impact. Mitigation is proposed to reduce this potentially significant impact to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-4 If human remains are encountered during earth-disturbing activities for the proposed project, all work within 100 feet of the find shall stop immediately and the Contra Costa County Coroner’s office shall be notified. If the Coroner determines the

remains are Native American in origin, the Native American Heritage Commission will be notified and, in turn, will notify the person determined to be the Most Likely Descendent (MLD). The MLD will provide recommendations for treatment of the remains (CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Sections 5097.94 and 5097.98).

Level of Significance After Mitigation

Less than significant impact.

4.5 - Geology, Soils, and Seismicity

4.5.1 - Introduction

This section describes the existing geology and soils setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Preliminary Geotechnical Investigation Report (Geotechnical Report), dated May 31, 2007 and prepared by MACTEC Engineering and Consulting Inc., included in this EIR as Appendix D. The MACTEC report reviewed previously prepared geotechnical investigations of the project site and surrounding properties. Those previously prepared reports also are included in Appendix D.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on geology, soils, and seismicity were less than significant after mitigation in Section 4.11 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all impacts related to geology, soils, and seismicity were less than significant after mitigation. Those previous mitigation measures are superseded by the mitigation measures contained in this DSEIR. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.5.2 - Environmental Setting

Regional Setting

The site is located within the San Ramon Valley, a portion of the California Coast Ranges geomorphic province. In general, the geologic structure and topography of the San Ramon Valley are characteristic of the San Francisco Bay Area. The region is generally defined by northwest-trending ridges and valleys that generally parallel the geologic structures, including the major fault systems. San Ramon Valley fill includes quaternary-aged alluvium up to approximately 300 feet in thickness. The valley is drained by both North and South San Ramon creeks that are actively cutting into the alluvial surface soils.

The San Ramon Valley is surrounded by the East Bay Hills, which are part of a block of folded and faulted Upper Cretaceous age (approximately 62 million to 98 million years ago) marine sedimentary rocks of the Great Valley Sequence. The hills were formed from younger rocks, uplifted between the Hayward and Calaveras fault zones. The San Ramon area is underlain by Tertiary (approximately 2 million to 62 million years ago) marine and non-marine sedimentary rocks. Sandstone bedrock crops out locally on ridge crests and underlies upper hill slopes at shallow depths.

Seismicity

The term seismicity describes the effects of seismic waves that radiate from an earthquake as it occurs. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. To understand the implications of seismic events, a discussion of faulting and seismic hazards is provided below.

Faulting

Faults form in rocks when stresses overcome the internal strength of the rock, resulting in a fracture. Large faults develop in response to large regional stresses operating over a long time, such as those stresses caused by the relative displacement between tectonic plates. According to the elastic rebound theory, these stresses cause strain to build up in the earth's crust until enough strain has built up to exceed the strength along a fault and cause a brittle failure. The slip between the two stuck plates or coherent blocks generates an earthquake. Following an earthquake, strain will build once again until the occurrence of another earthquake. The magnitude of slip is related to the maximum allowable strain that can be built up along a particular fault segment. The greatest buildup in strain due to the largest relative motion between tectonic plates or fault blocks over the longest period will generally produce the largest earthquakes. The distribution of these earthquakes is a study of much interest for both hazard prediction and the study of active deformation of the earth's crust. Deformation is a complex process and strain caused by tectonic forces is not only accommodated through faulting, but also by folding, uplift, and subsidence, which can be gradual or in direct response to earthquakes.

Faults are mapped to determine earthquake hazards, since they occur where earthquakes tend to recur. A historic plane of weakness is more likely to fail under stress and strain than a previously unbroken block of crust. Faults are, therefore, a prime indicator of past seismic activity, and faults with recent activity are presumed to be the best candidates for future earthquakes. However, since slip is not always accommodated by faults that intersect the surface along traces, and since the orientation of stress and strain in the crust can shift, predicting the location of future earthquakes is complicated. Earthquakes sometimes occur in areas with previously undetected faults or along faults previously thought inactive.

Local Faulting

There are several active faults in the immediate and surrounding areas that could affect the project site. The major active fault in the vicinity is the Calaveras Fault, which lies parallel to and just west

of San Ramon Valley Boulevard. The California Legislature has established an Alquist-Priolo Earthquake Fault Zone along the Calaveras Fault, requiring detailed studies of rupture hazards prior to construction. The project site is not located within the Calaveras Fault Zone. The seismic activity, along with the approximate distance and direction of all known mapped active faults with the potential to affect the project site, is summarized in Table 4.5-1.

Table 4.5-1: Fault Summary

Fault/Fault Zone	Distance from Project Site (miles)	Relationship to Project Site	Slip Rate (inches/year)	Maximum Moment Magnitude
Calaveras	0.6	Southwest	0.24	6.8
Concord-Green Valley	8.0	North	0.24	6.9
Hayward	9.0	Southwest	0.35	7.1
Greenville	10.0	Northeast	0.08	6.9
Great Valley	16.0	Northeast	0.06	6.7
San Andreas	27.0	Southwest	0.94	7.9
Monte Vista – Shannon	28.0	Southwest	0.02	6.5
Rodgers Creek	30.0	Northwest	0.35	7.0
San Gregorio	33.0	Southwest	0.20	7.3
West Napa	41.0	Northwest	0.04	6.5
Sargent	44.0	South	0.12	6.8
Ortogonalita	49.0	Southeast	0.04	6.9
Point Reyes	59.0	Northwest	0.01	6.8

Source: MACTEC Engineering and Consulting, Inc., 2007.

Peak ground acceleration is a measure of earthquake acceleration, and how hard the earth shakes in a given geographic area. Peak ground acceleration is measured in g (the acceleration due to gravity). The Geotechnical Report indicated that the maximum estimated peak ground acceleration at the project site is as follows:

- A 5-percent chance of 0.78 g in 50 years
- A 10-percent chance of 0.62 g in 50 years

Seismic Hazards

Seismic hazards pose a substantial danger to property and human safety and are present because of the risk of naturally occurring geologic events and processes impacting human development. Therefore, the hazard is as influenced by the conditions of human development as by the frequency and distribution of major geologic events. Seismic hazards present in California include ground rupture along faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure. Exhibit 4.5-1 shows local seismic hazards in the San Ramon area.

Fault Rupture

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the movement of the ground surface along a fault during an earthquake. Typically, this movement takes place during the short time of an earthquake, but can also occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet commonly associated with fault rupture or creep.

Ground Shaking

The severity of ground shaking depends on several variables such as earthquake magnitude, epicenter distance, local geology, thickness, and seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Ground shaking hazards are most pronounced in areas near faults or with unconsolidated alluvium.

The most common type of damage from ground shaking is structural damage to buildings, which can range from cosmetic stucco cracks to total collapse. The overall level of structural damage from a nearby large earthquake would likely be moderate to heavy, depending on the characteristics of the earthquake, the type of ground, and the condition of the building. Besides damage to buildings, strong ground shaking can cause severe damage from falling objects or broken utility lines. Fire and explosions are also hazards associated with strong ground shaking.

While Richter magnitude provides a useful measure of comparison between earthquakes, the moment magnitude is more widely used for scientific comparison, since it accounts for the actual slip that generated the earthquake. Actual damage is due to the propagation of seismic or ground waves as a result of initial failure, and the intensity of shaking is related as much to earthquake magnitude as to the condition of underlying materials. Loose materials tend to amplify ground waves, while hard rock can quickly attenuate them, causing little damage to overlying structures. For this reason, the Modified Mercalli Intensity (MMI) Scale provides a useful qualitative assessment of ground shaking. The MMI Scale is a 12-point scale of earthquake intensity based on local effects experienced by people, structures, and earth materials. Each succeeding step on the scale describes a progressively greater amount of damage at a given point of observation. The MMI Scale is shown in Table 4.5-2, along with relative ground velocity and acceleration.

Table 4.5-2: Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration
0.1–0.9	I	Not felt. Marginal and long-period effects of large earthquakes	—	—



Source: City of San Ramon.



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Exhibit 4.5-1 Local Seismic Hazards

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Table 4.5-2 (Cont.): Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration
1.0–2.9	II	Felt by only a few persons at rest, especially on upper floors of building. Delicately suspended objects may swing.	—	—
3.0–3.9	III	Felt quite noticeable in doors, especially on upper floors of building, but many people do not recognize it as an earthquake. Standing cars may rock slightly. Vibration like passing a truck. Duration estimated.	—	0.0035–0.007 g
4.0–4.5	IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensations like heavy truck striking building. Standing cars rocked noticeably.	1–3	0.015–0.035 g
4.6–4.9	V	Felt by nearly everyone, many awakened. Some dishes, windows, and so on broken; cracked plaster in a few places; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.	3–7	0.035–0.07 g
5.0–5.5	VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster and damaged chimneys. Damage slight.	7–20	0.07–0.15 g
5.6–6.4	VII	Everyone runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving cars.	20–60	0.15–0.35 g
6.5–6.9	VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monument walls, and heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving in cars disturbed.	60–200	0.35–0.7 g

Table 4.5-2 (Cont.): Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/second)	Average Peak Acceleration
7.0–7.4	IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	200–500	0.7–1.2 g
7.5–7.9	X	Some well-built structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Railway lines bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed, sloped over banks.	≥ 500	>1.2 g
8.0–8.4	XI	Few, if any masonry structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent gently.		
≥ 8.5	XII	Total damage. Waves seen on ground. Lines of sight and level distorted. Objects thrown into the air.		
Source: United States Geologic Survey.				

Ground Failure

Ground failure includes liquefaction and the liquefaction-induced phenomena of lateral spreading, and lurching.

Liquefaction is a process by which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid rather than a solid. Liquefaction is restricted to certain geologic and hydrologic environments, primarily recently deposited sand and silt in areas with high groundwater levels. The process of liquefaction involves seismic waves passing through saturated granular layers, distorting the granular structure, and causing the particles to collapse. This causes the granular layer to behave temporarily as a viscous liquid rather than a solid, resulting in liquefaction.

Liquefaction can cause the soil beneath a structure to lose strength, which may result in the loss of foundation-bearing capacity. This loss of strength commonly causes the structure to settle or tip. Loss of bearing strength can also cause light buildings with basements, buried tanks, and foundation piles to rise buoyantly through the liquefied soil.

Lateral spreading is lateral ground movement, with some vertical component, as a result of liquefaction. In effect, the soil rides on top of the liquefied layer. Lateral spreading can occur on relatively flat sites with slopes less than 2 percent, under certain circumstances, and can cause ground cracking and settlement.

Lurching is the movement of the ground surface toward an open face when the soil liquefies. An open face could be a graded slope, stream bank, canal face, gully, or other similar feature.

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides and rock fall—processes that are commonly triggered by intense precipitation, which varies according to climactic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in non-technical literature to describe a variety of shallow, rapidly moving earth flows.

Project Site

The project site is composed of four parcels located on all four quadrants of the intersection of Bollinger Canyon Road and Camino Ramon. A description of the existing conditions on each parcel is provided below.

Existing Site Conditions

Parcel 1A

Parcel 1A consists of 14.27 acres of developed parking areas and undeveloped land. The developed parking areas are associated with the existing Bishop Ranch 1 office complex and are characterized as at-grade, asphalt-paved with landscaped islands. The undeveloped land is characterized by flat relief and ruderal vegetation, and contains fill imported from other nearby parcels that have been developed. Ornamental landscaping surrounds the undeveloped land on all four sides.

Parcel 1B

Parcel 1B consists of 3.52 acres of a developed parking area associated with Bishop Ranch 1. The parking area is characterized as at-grade, asphalt-paved with landscaped islands. Ornamental landscaping surrounds the parcel on the west, north, and east sides.

Parcel 2

Parcel 2 consists of the existing 14.57-acre, Bishop Ranch 2 office complex. Bishop Ranch 2 contains 194,652 square feet of office space spread among four, multi-story office structures with an interior turf courtyard landscaped area. Parking areas are located around the perimeter of the parcel and are characterized as at-grade, asphalt-paved areas with landscaped islands. Ornamental landscaping surrounds the parcel on all four sides.

Parcel 3A

Parcel 3A is an 11.29-acre, undeveloped parcel containing ruderal vegetation. A storage container surrounded by fencing is located in the eastern portion of the parcel. The parcel contains fill imported from other nearby parcels that have been developed. Ornamental landscaping is present along its frontage with Camino Ramon.

Onsite Soils

Five soil types are found on the four parcels comprising the project site and are summarized in Table 4.5-3. Exhibit 4.5-2 shows the soil mapping for the project site.

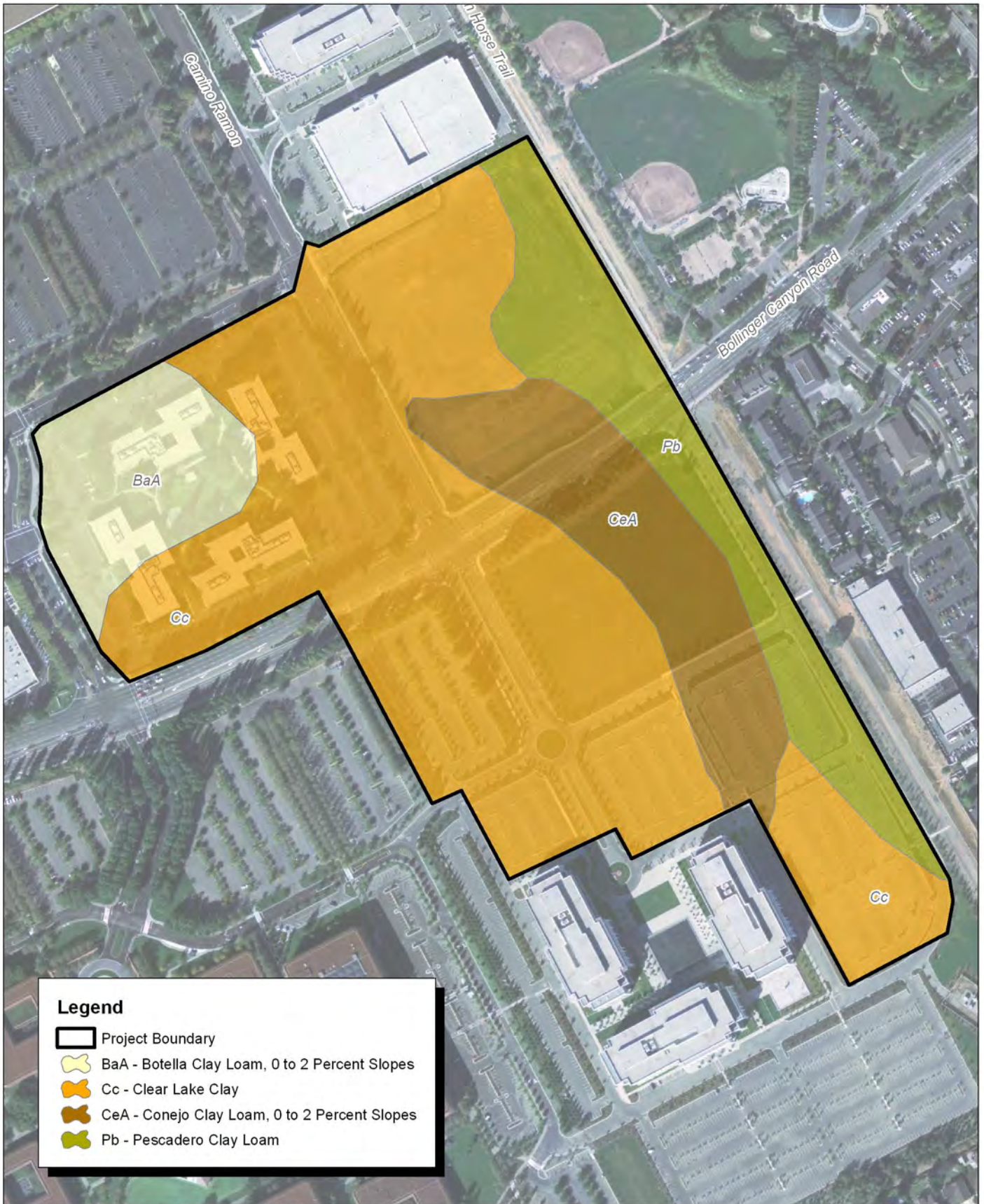
Table 4.5-3: Soil Type by Parcel

Parcel	Soils
1A	Clear Lake Clay, Conejo Clay Loam, Pescadero Clay Loam, and fill
1B	Clear Lake Clay
2	Botella Clay Loam and Clear Lake Clay
3A	Clear Lake Clay, Conejo Clay Loam, Pescadero Clay Loam, and fill
Source: MACTEC Engineering and Consulting, Inc., 2007; Natural Resources Conservation Service, 2007.	

A summary of soil properties for the onsite soils is provided in Table 4.5-4. As shown in the table, soils onsite have low or moderate erosion potentials and moderate to very slow infiltration rates. Soils have a relatively high clay content indicating a high shrink-swell potential and, therefore, are considered expansive soils.

Table 4.5-4: Soil Properties Summary

Soil	Soil Surface Texture	Infiltration Rate	K-Factor	pH	Percent of Clay
Botella Clay Loam	Clay Loam	Moderate	0.24	6.7	32.5
Clear Lake Clay	Clay	Very Slow	0.20	7.6	48.7
Conejo Clay Loam	Clay Loam	Slow	0.20	6.7	31.0
Pescadero Clay Loam	Clay Loam	Very Slow	0.28	8.4	42.6



Source: Terraserver and USDA Soils (NRCS).



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Exhibit 4.5-2 USDA Soils Map

Table 4.5-4 (Cont.): Soil Properties Summary

Soil	Soil Surface Texture	Infiltration Rate	K-Factor	pH	Percent of clay
Notes: K-Factor = Measurement of soil erodibility: values of less than 0.25 indicate low erosion potential; values of 0.25–0.40 indicate moderate erosion potential; values above 0.40 indicate high erosion potential. Infiltration rate is an indicator of the runoff rate of a soil when not protected by vegetation, thoroughly wet, and receives precipitation from storms of long duration. The slower the infiltration rate, the higher the runoff rate. Source: Natural Resources Conservation Service Website, 2007.					

Laboratory Testing

Laboratory results from previous geotechnical reports for the project site and adjacent properties were referenced in preparing the Geotechnical Report. Soil samples from all four parcels had previously been tested and the results were reviewed to determine the types of soil present and relative properties of the soil for the Geotechnical Report. The Geotechnical Report, bore logs, and selected laboratory results are included in this EIR as Appendix D. Testing included evaluations of dry density and moisture content, particle size analysis, soil corrosivity, pH, sulfate, chloride, resistivity, Atterberg limits, R-value, consolidation test, and Modified Proctor Compaction. The properties of the soil on all four parcels were similar. The key testing results are summarized below and are consistent with the soil characteristics in the above table.

- Soil expansion potential is moderate.
- Soils have a relatively high clay content.
- Soils have low liquefaction and densification potential have a relatively low settlement potential.
- Soils are relatively compressible.
- Soil characteristics related to pH, electrical conductivity, redox potential, and chloride concentration indicate that the soils are corrosive to very corrosive to buried metal.
- Soil characteristics related to sulfate concentration indicate that the soils potential to corrode buried concrete is negligible.
- According to the Geotechnical Report, from an engineering standpoint, the project site is suitable for the development described.

Groundwater

Groundwater levels, determined from previous borings, varied from 7 to 20 feet below ground surface. Groundwater is discussed further in Section 4.7, Hydrology.

4.5.3 - Regulatory Framework

Federal

Clean Water Act § 402

Clean Water Act (CWA) § 402 mandates that certain types of construction activity comply with the requirements of Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES) stormwater program. Construction activities that disturb one or more acres of land must obtain coverage under the NPDES general construction activity stormwater permit, which is issued by San Francisco Regional Water Quality Control Board (RWQCB). Obtaining coverage under the NPDES general construction activity stormwater permit generally requires that the project applicant complete the following steps:

- File a Notice of Intent with RWQCB that describes the proposed construction activity before construction begins.
- Prepare a Storm Water Pollution Prevention Plan (SWPPP) that describes Best Management Practices (BMPs) that will be implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction.
- File a notice of termination with RWQCB when construction is complete and the construction area has been permanently stabilized.

State

Alquist-Priolo Earthquake Fault Zoning Act

In response to the severe fault rupture damage of structures by the 1971 San Fernando earthquake, the State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972. This act required the State Geologist to delineate Earthquake Fault Zones (EFZs) along known active faults that have a relatively high potential for ground rupture. Faults that are zoned under the Alquist-Priolo Act must meet the strict definition of being "sufficiently active" and "well-defined" for inclusion as an EFZ. The EFZs are revised periodically, and they extend 200 to 500 feet on either side of identified fault traces. No structures for human occupancy may be built across an identified active fault trace. An area of 50 feet on either side of an active fault trace is assumed to be underlain by the fault, unless proven otherwise. Proposed construction in an EFZ is permitted only following the completion of a fault location report prepared by a California Professional Geologist.

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, sets forth minimum requirements for building design and construction. The California Building Standards Code is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by State agencies without change from building standards contained in national model codes

- Building standards that have been adopted and adapted from the national model code standards to meet California conditions
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns

In the context of earthquake hazards, the California Building Standards Code's design standards have a primary objective of assuring public safety and a secondary goal of minimizing property damage and maintaining function during and following seismic events. Recognizing that the risk of severe seismic ground motion varies from place to place, the California Building Standards Code seismic code provisions will vary depending on location (Seismic Zones 0, 1, 2, 3, and 4; with 0 being the least stringent and 4 being the most stringent).

Regional Water Quality Control Board

The RWQCB regulates State water quality standards in the San Ramon area. Beneficial uses and water quality objectives for surface water and groundwater resources in the project area are established in the water quality control plans (basin plans) of each RWQCB as mandated by the State Porter-Cologne Act and the CWA. The RWQCBs also implement CWA Section 303(d) total maximum daily load (TMDL) process, which consists of identifying candidate water bodies where water quality is impaired by the presence of pollutants. The TMDL process is implemented to determine the assimilative capacity of the water body for the pollutants of concern and to establish equitable allocation of allowable pollutant loading within the watershed. Section 401 of the CWA requires an applicant pursuing a federal permit to conduct any activity that may result in a discharge of a pollutant to obtain a water quality certification (or waiver) from the applicable RWQCB.

The RWQCBs primarily implement basin plan policies through issuing waste discharge requirements for waste discharges to land and water. The RWQCBs are also responsible for administering the NPDES permit program, which is designed to manage and monitor point and nonpoint source pollution. NPDES stormwater permits for general construction activity are required for projects that disturb more than one acre of land. Municipal NPDES stormwater permits are required for urban areas with populations greater than 100,000. The Contra Costa Clean Water Program administers municipal NPDES permitting in San Ramon. The City must comply with the provisions of the permit by ensuring that, among other things, new development and redevelopment projects mitigate, to the maximum extent practicable, water quality impacts to stormwater runoff during the project's construction and operational periods.

The general NPDES stormwater permits for general construction activities require the applicant to file a Notice of Intent (NOI) to discharge stormwater with the RWQCB and to prepare and implement an SWPPP. The SWPPP would include a site map, description of stormwater discharge activities, and a list of BMPs that would be employed to prevent water pollution. It must describe BMPs that would be used to control soil erosion and discharges of other construction-related pollutants (e.g., petroleum

products, solvents, paints, cement) that could contaminate nearby water resources. It must demonstrate compliance with local and regional erosion and sediment control standards, identify responsible parties, provide a detailed construction timeline, and implement a BMP monitoring and maintenance schedule.

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following policies related to geology, soils, and seismicity:

- **Policy 9.1-I-1:** Review proposed development sites at the earliest stage of the planning process to locate any potential geologic or seismic hazards.
- **Policy 9.1-I-4:** Require comprehensive geologic and engineering studies of critical structures regardless of location.
- **Policy 9.1-I-5:** Require geotechnical field review during the construction phase of any new development.
- **Policy 9.1-I-6:** Require preparation of a soils report as part of the development review and/or building permit process.
- **Policy 9.1-I-10:** Control erosion of graded areas with revegetation or other acceptable methods.

San Ramon City Code

The San Ramon City Code Division C7 establishes requirements related to grading and erosion control. The division sets forth rules and regulations to control excavation, grading, and earthwork construction, including fills and embankments, and establishes administrative requirements for issuance of permits and approval of plans and inspection of grading construction in accordance with the requirements for grading and excavation. All projects within the City limits involving earthwork activities must obtain a grading permit and adhere to the requirements stipulated in the City Code.

4.5.4 - Methodology

MACTEC Engineering and Consulting, Inc. performed a geotechnical evaluation of the project site and summarized its findings in the Preliminary Geotechnical Investigation Report, dated May 31, 2007. The Geotechnical Report included a literature review of regional geology, faults, and seismic hazards, as well as the review of previous laboratory testing results of soils on the project site to analyze the subsurface profile of the site. Previous studies reviewed in the MACTEC report included the following:

- Geotechnical Investigation at Chevron/Texaco Campus Lots 16, 20, and 21 of the Bishop Ranch Business Park; prepared by Kleinfelder, Inc., dated June 9, 2005

- Preliminary Geotechnical Exploration, San Ramon City Center; prepared by ENGEO Incorporated, dated March 29, 2001
- Geotechnical Investigation, Bishop Ranch 1 Development, Bishop Ranch Business Park; prepared by Harding Lawson Associates, dated May 15, 2000
- Geotechnical Investigation, Bishop Ranch 1 Development, Bishop Ranch Business Park; prepared by Harding Lawson Associates, dated October 6, 1986
- Soil Investigation, Bollinger Business Center, Bishop Ranch; prepared by Harding Lawson Associates, dated April 6, 1982

The studies listed above included laboratory testing of soils on the parcels comprising the project site and on neighboring properties considered representative of the project site. Laboratory tests performed are listed below. The laboratory testing data sheets are contained in Appendix D.

- Unconfined Compression Strength (ASTM D2216)
- Particle Size Analysis (ASTM D422)
- Atterberg Limits (ASTM D4318)
- Expansion Index (UBC 29-2)
- Consolidation/Swell Test (D2435, and D4546)
- Direct Shear (modified ASTM D3080)
- Modified Proctor Compaction (ASTM D1557)
- R-Value - Caltrans Method 301 (ASTM D2844)
- Soil Corrosivity, Redox, pH, Conductivity, Sulfide, Chloride, and Sulfate (ASTM D1498, D4972, D1125Mod, G57m D4658Mod, and D4327)
- Natural Unit Weight and Moisture Content
- Unconfined Compression Test (ASTM D2166)

4.5.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to geology and soils are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on

- other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b.) Result in substantial soil erosion or the loss of topsoil?
 - c.) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
 - d.) 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?
 - e.) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (Refer to Section 7, Effects Found Not To Be Significant.)

4.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Seismic Hazards

Impact GEO-1: The proposed project would not expose persons or structures to seismic hazards.

Impact Analysis

The project site is located in an area of high seismicity, as is all of the San Francisco Bay Area. Potential seismic hazards include fault rupture, strong ground shaking, ground failure, and landsliding. The geotechnical report evaluated the potential for these seismic hazards, and the findings are summarized below.

Fault Rupture

The project site is not within an Alquist-Priolo Earthquake Fault Zone. In addition, no known faults cross the project site or are oriented toward the project site. This condition precludes the possibility of fault rupture occurring on the project site. No impacts would occur.

Seismic Ground Shaking

A major seismic event on one of the faults listed in Table 4.5-1 may result in strong ground shaking on the project site. To reduce the potential for exposure of persons and property to harm, the proposed project would be required to meet the applicable seismic design standards of Seismic Zone 4 of the California Building Standards Code. As noted above, these design standards

correspond to the level of seismic risk in a given location and are intended primarily to protect public safety and secondly to minimize property damage. Compliance with the seismic design standards of the California Building Standards Code would ensure that potential impacts are less than significant.

Seismic-Related Ground Failure

The Geotechnical Report indicated some saturated sand layers and lenses are present below the site. However, the project site has a low susceptibility for seismic-related ground failure, including liquefaction and liquefaction-related phenomena, because the underlying sand units are relatively thin, discontinuous, and contain appreciable concentrations of fine-grain material components. While the likelihood of seismic-related ground failure is low, the proposed project would comply with all applicable California Building Standards Code seismic design standards. Compliance with these standards would ensure that the proposed structures would not expose persons to seismic-related ground failure hazards.

Landslides

The project site and immediate vicinity is characterized by flat relief with slopes of less than 5 percent. This condition precludes the possibility of earthquake-induced landsliding occurring onsite. No impacts would occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Soil Erosion or Topsoil Loss

Impact GEO-2: The proposed project may result in substantial erosion or loss of topsoil.

Impact Analysis

The proposed project would require extensive grading and excavation. During these activities, there would be the potential for surface water to carry sediment from onsite erosion into the stormwater system and local waterways. Soil erosion may occur along project boundaries during construction in areas where temporary soil storage is required. As noted in Table 4.5-4, all four soil types mapped on the project site have moderate or low erosion potential. Nonetheless, the potential for erosion hazards associated with construction activities exists.

Construction activities associated with the proposed project would involve vegetation removal, grading, and excavation activities that could expose barren soils to sources of wind or water, resulting in erosion and sedimentation on and off the project site. NPDES Phase II stormwater permitting programs regulate stormwater quality from construction sites, which includes erosion and

sedimentation. Under the NPDES permitting program, the preparation and implementation of SWPPPs are required for construction activities more than one acre in size. The SWPPP must identify potential sources of erosion or sedimentation that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement BMPs that ensure the reduction of these pollutants during stormwater discharges. Typical BMPs intended to control erosion include sand bags, detention basins, silt fencing, landscaping, hydroseeding, storm drain inlet protection, street sweeping, and monitoring of water bodies.

Prior to construction grading, the applicant must file a NOI to comply with the General NPDES Permit issued to the RWQCB and prepare the SWPPP, which addresses the measures that would be included in the project to minimize and control construction and post-construction runoff to the “maximum extent practicable.” In addition, the proposed project would be required to comply with the City Code requirements pertaining to grading and excavation.

These requirements have been incorporated into the proposed project as mitigation. The implementation of the above requirements (including the preparation and implementation of an SWPPP and compliance with City Code requirements) would reduce potential construction-related erosion impacts to a level of less than significant.

The proposed project would result in the coverage of the project site with impervious surfaces and landscaping, which would eliminate the potential for erosion to occur once the project has been completed.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Refer to Mitigation Measures HYD-1a and HYD-1b in Section 4.7, Hydrology and Water Quality.

Level of Significance After Mitigation

Less than significant impact.

Unstable Geologic Units or Soils

Impact GEO-3: **The project site contains fill of unknown origin that may be unable to adequately support structures associated with the proposed project if left unmitigated.**

Impact Analysis

The Geotechnical Report indicated that Parcels 1A and 3A contain fill imported from nearby parcels that have been developed. The Geotechnical Report could not determine its vertical and lateral extent, placement, or composition, and, therefore, concluded that its engineering properties were unknown and would require further evaluation prior to grading. If left unabated, the fill may be unsuitable for development and may be susceptible to subsidence or collapse. Mitigation is proposed that would require the project applicant to conduct an *in situ* site investigation on Parcels 1A and 3A

prior to grading and incorporate the recommendations of the investigation into the project. This mitigation would reduce potential impacts to a level of less than significant.

The Geotechnical Report also indicated that onsite soils are relatively compressible. Because of the compressible soils, some building structural loads could settle excessively if supported by shallow spread footings. If left unabated, this could expose persons and structures to settlement hazards. Mitigation is proposed that would require the project applicant to retain an engineer to design a foundation system to adequately support the proposed project's structures and implement the design requirements into the proposed project. This mitigation would reduce potential impacts to a level of less than significant.

In addition, because of uncertainties about subsurface conditions in previously unexplored areas, the extent and nature of the fill on Parcel 1A, the suitability for foundation piles, and groundwater levels, mitigation is proposed that would require additional geotechnical investigations of these issues. The recommendations of these additional geotechnical investigations shall be incorporated into the project design. This mitigation would reduce potential impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM GEO-3a** Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to test the existing imported fill soils on Parcels 1A and 3A to determine their *in situ* compaction and suitability for excavation and reuse as engineered fill. Soil testing can be avoided if the applicant elects to remove the fill and place it either in areas where it will not support buildings or in paved areas (i.e., landscaped areas) or dispose of it offsite.
- MM GEO-3b** Prior to the commencement of building construction, the project applicant shall retain a qualified engineer to design a foundation system adequate to support the proposed project's structures. Based on the recommendations of the Geotechnical Report, the foundation should be pile-supported. Pile types may include, but are not limited to, driven, drilled, cast-in-place, concrete piers, or auger cast-in-place concrete piles. Settlement analysis shall be performed once the structural design loads and foundation system geometry have been defined for each building. This mitigation measure does not preclude the use of structural raft foundations or a mix of deep and shallow foundations, provided that detailed design analysis has been conducted to verify the suitability of these foundations.
- MM GEO-3c** Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to perform additional geotechnical investigations.

The recommendations of these additional investigations shall be incorporated into the project design. Additional geotechnical investigations shall determine:

- The subsurface conditions in areas not previously investigated
- The nature and extent of the stockpiled soils (undocumented fill) on Parcel 1A
- Deeper soil data to support the analysis of longer and higher-capacity piles
- Current information regarding depths to groundwater for buildings that will have full-depth basements

Level of Significance After Mitigation

Less than significant impact.

Expansive Soils

Impact GEO-4: **The project site contains moderately expansive soils that may create substantial risks to life or property if left unmitigated.**

Impact Analysis

The Geotechnical Report indicated that moderately expansive clay soils are present on the project site. These soils have shrink-swell properties that may expose buildings to structural damage if left unabated. The Geotechnical Report recommended that clay soils with expansive properties be either tested to determine their adequacy for supporting structures or removed. This has been incorporated into the proposed project as mitigation. The implementation of this mitigation measure would reduce expansive soils impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-4a Prior to the commencement of grading activities, the project applicant shall retain a qualified geotechnical consultant to test the existing onsite expansive clay soils on Parcels 1A and 3A to determine their *in situ* compaction and suitability for excavation and reuse as engineered fill. Soil testing can be avoided if the applicant elects to remove the expansive clay soils and place them in areas where they will not support buildings or paved areas (i.e., landscaped areas) or dispose of them offsite. This mitigation measure does not preclude the use of lime treatment, provided that detailed design analysis has been conducted to verify the suitability of this approach.

Level of Significance After Mitigation

Less than significant impact.

4.6 - Hazards and Hazardous Materials

4.6.1 - Introduction

This section describes the existing setting regarding hazards and hazardous materials and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Phase I Environmental Site Assessment, prepared in June 2007 by Michael Brandman Associates, included in this EIR as Appendix E.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts related to hazards and hazardous materials were less than significant after mitigation in Section 4.9 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and scoped out the hazards and hazardous materials topical area and its associated issues during the Initial Study/Notice of Preparation process as effects found not to be significant. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.6.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic (causes human health effects)
- Ignitable (has the ability to burn)
- Corrosive (causes severed burns or damage to materials)
- Reactive (causes explosions or generates toxic gases)

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if

released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Record Search

A search of federal, State, and local databases by Environmental Data Resources, Inc. (EDR) that list contaminated sites, Brownfield sites (a development site having the presence or potential presence of a hazardous substance, pollutant, or contaminant), underground storage tank (UST) sites, waste storage sites, toxic chemical sites, contaminated well sites, clandestine drug lab sites, and other sites containing hazardous materials yielded multiple sites within 1 mile of the project. The project site was not listed on any databases. There were several surrounding sites in the project area. The sites within 0.25 mile of the four parcels comprising the project site are summarized in Table 4.6-1.

Table 4.6-1: Recorded Sites Near the Project Site

Name	Location	Database(s)
AT&T campus	2600 Camino Ramon	RCRAInfo CESQGs; UST; HIST UST; SL; SWEEPS
Chevron Park	6001 Bollinger Canyon Road	RCRAInfo CESQGs, SL; SWEEPS
San Ramon Valley Fire Station	12599 Alcosta Boulevard	UST; SL Cortese; LUST
Valero Gas Station	1091 Market Place	Cortese; LUST; SWEEPS
Marriott Hotel	2600 Bishop Drive	UST; SL; SWEEPS
Bishop Ranch 3	2623 Camino Ramon	SL
Target	2610 Bishop Drive	SL
Bishop Ranch 1	6111 Bollinger Canyon Road	SL
Orchard Supply Hardware	1041 Market Place	SL
Green Valley Cleaners	1021 Market Place	SL
Longs Drug Store	490 Market Place	SL; DRYCLEANERS

Notes:

RCRAInfo: United States Environmental Protection Agency (EPA) comprehensive database for data supporting the Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments. Includes sites that generate, transport, store, treat, and/or dispose of hazardous waste. Conditionally exempt small quantity generators (CESQGs) that generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

CORTESE: Database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known migration.

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents.

UST: The Underground Storage Tank database contains registered USTs, regulated under Subtitle I of RCRA.

Table 4.6-1 (Cont.): Recorded Sites Near the Project Site

Name	Location	Database(s)
<p>HIST UST: Historical UST Registered Database. SL: Lists includes sites from the Underground Tank Program, Hazardous Waste Generator Program & Business Plan 12185 Program. SWEEPS: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1980s but is no longer updated or maintained. Local agencies serve as contacts for SWEEPS. DRYCLEANERS: List of dry cleaner-related facilities that have EPA ID numbers, includes facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning; industrial launderers; and laundry and garment services. Source: Michael Brandman Associates, 2007.</p>		

Aerial Photographs

Aerial photographs of the project area dating to 1939 were obtained as part of the Phase I ESA process. The changes that occur to the project site and surroundings are summarized in Table 4.6-2.

Table 4.6-2: Aerial Photograph Summary

Year	Description
1939	The project site contains orchards. A residential structure associated with the orchards is visible north of the project site, near the present-day location of Bishop Ranch 3. An east-west dirt road connects the structure with a two-lane, north-south road that follows the general alignment of present-day San Ramon Valley Boulevard. A single-track rail line is visible along the present-day Iron Horse Trail corridor.
1946	More structures are visible near the residential north of the site. No other notable changes have occurred.
1959	No notable changes have occurred.
1965	Portions of the project site have been cleared of orchards. Interstate 680 is under construction west of the project site.
1982	Bishop Ranch 2 is under construction. Orchards are still visible on Parcels 1A and 1B, but they have been removed from Parcel 3A. Interstate 680 (I-680), Bollinger Canyon Road, and Alcosta Boulevard are visible. San Ramon Valley Boulevard has been re-routed around the west side of the Bollinger Canyon Road over crossing of the freeway. Streets following the present-day alignment of Bishop Drive, Camino Ramon, and Executive Parkway are being constructed. The AT&T campus is under construction. Chevron Park is under construction, and the road linking the east side of the campus with the intersection of Bollinger Canyon Road and Camino Ramon is visible. Residential construction is visible south of Chevron Park, west of I-680, and east of Alcosta Boulevard. The railroad line has been abandoned and the rails have been removed.
1993	Bishop Ranch 2, the AT&T campus, Chevron Park, Sunset Drive, Bishop Drive, Camino Ramon have been completed. Parcels 1A, 1B, and 3A are vacant. Central Park, the Market Place, and the Reflections Condominiums are visible. Residential development is visible east of Alcosta Boulevard, south of Chevron Park, and west of I-680. The Marriot Hotel is visible. The Bollinger Canyon Road interchange with I-680 is visible.
1998	Parcels 1A and 1B have been graded and the road linking the east side of Chevron Park with the intersection of Bollinger Canyon Road and Camino Ramon is no longer visible. The Bishop Ranch 1 East road is under construction. Parcel 3A is undeveloped. Bishop Ranch 3 is under construction. Iron Horse Middle School is visible.
Source: Michael Brandman Associates, 2007.	

Topographical Maps

United States Geologic Survey 7.5-minute topographical quadrangles of the project area dating to 1912 were obtained as part of the Phase I ESA process. The changes that occur to the project site and surroundings are summarized in Table 4.6-3.

Table 4.6-3: Topographical Map Summary

Quadrangle	Year	Description
Mt Diablo	1912	The San Ramon branch line is visible. A road following the present day alignment of San Ramon Valley Boulevard is visible. San Ramon Creek is shown as a blue line stream.
Mt Diablo	1947	The project site is shown as being in agricultural use. The road following the present day alignment of San Ramon Valley Boulevard is noted as “21.” Roadways following the present day alignments of Norris Canyon Road and Crow Canyon Road are visible, as well as several minor east-west farm roads.
Diablo	1953	No notable changes to project site. An airstrip is shown on the west side of San Ramon Valley Boulevard. A water tank and structures are noted at a location labeled “San Ramon Siding” at the present-day Crow Canyon Road and the Iron Horse Trail.
Diablo	1968	No notable changes to project site. I-680 is visible and noted as being “3 lane.” An over crossing of the freeway is noted at the present-day location of the Bollinger Canyon Road interchange; however, the road terminates immediately east of the freeway. The Crow Canyon Road interchange with I-680 is visible. More development is shown at San Ramon Siding.
Diablo	1973	No notable changes to project site. The Twin Creeks neighborhood is shown.
Diablo	1980	No notable changes to project site. The railroad is shown as abandoned and labeled as “Old Railroad Grade.” Bollinger Canyon Road and Alcosta Boulevard are visible; both roads terminate at their intersection. Residential development is visible west of I-680 and south of present-day Chevron Park.
Source: Michael Brandman Associates, 2007.		

Hazardous Building Materials

The Phase I ESA assessed the potential for hazardous building materials to be present on the project site. A summary of the findings follows.

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal OSHA) defines asbestos-containing materials as any material that contains 0.1 percent asbestos by weight.

The Bishop Ranch 2 structures were constructed in the early 1980s. Because they were constructed after the federal ban on asbestos-containing materials was imposed, the Phase I ESA concluded that there was a very low likelihood that they are present onsite. There are no other structures onsite.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil.

The Bishop Ranch 2 structures were constructed in the early 1980s. Because they were constructed after the federal ban on lead-based paint and other lead-based building materials was imposed, the Phase I ESA concluded that there was a very low likelihood that they are present onsite. There are no other structures onsite.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of man-made chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977.

No electrical transformers were observed on the four parcels comprising the project site. A Chevron Corporation utility corridor that contains electrical transformers is located south of Parcel 1A on the opposite side of the Bishop Ranch 1 East roadway. This utility corridor is monitored by a security camera and appeared to be good condition. Electrical transformers may contain transformer oil. Although oil is typically not highly toxic or mobile in the environment, transformer oil may contain PCBs.

Pesticides

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. The term pesticide applies to insecticides, herbicides, fungicides, and various other substances used to control pests. The health effects of pesticides depend on the type of pesticide. Examples of health risks posed by pesticides include cancer, nervous system damage, hormone or endocrine disruption, and eye or skin irritation.

The project site contained orchards until the early 1980s. Pesticides were likely routinely applied as part of pest abatement. The orchards were removed in the early 1980s, and all four project parcels have either been developed or substantially graded since then. Moreover, it is unlikely that any

pesticide residue is still present onsite 25 years after the last application. Therefore, the Phase I ESA concluded that the likelihood of pesticides being present onsite is very unlikely.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The U.S. Environmental Protection Agency (EPA) has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l).

Radon screening tests conducted in the site vicinity did not detect radon above 4 pCi/l at four sites tested. The EPA has rated Contra Costa County as a moderate potential radon zone (Zone 2), with an average indoor activity level of 2 to 4 pCi/l radon. Accordingly, radon does not pose a constraint to development on the project site.

High-Voltage Power Lines

High-voltage power lines emit electromagnetic fields (EMFs), which have been alleged to be a cause of cancer. However, scientific research has never conclusively established a link between EMFs and cancer.

An existing 230-kilovolt (kV), high-voltage, Pacific Gas and Electric Company (PG&E) power line parallels the Iron Horse Trail in Central Park, approximately 100 feet east of Parcels 1A and 3A. The line is the “research tap” for the PG&E research facility on Crow Canyon Road and connects to a regional transmission line that traverses San Ramon east to west in the southern portion of the City.

Hydrocarbons/Aboveground and Underground Storage Tanks

Petroleum hydrocarbons are derived from crude oil, which is refined into various petroleum products such as diesel, gasoline, kerosene, lubricants, and heavy fuel oils. Hydrocarbons constituents include benzene, N-heptane, and toluene, and generate health effects such as cancer, leukemia, asthmatic bronchitis, kidney damage, and eye irritation. Hydrocarbons are stored in aboveground storage tanks (ASTs) and USTs. Leaking ASTs and USTs can result in contamination of groundwater sources or fire and explosion.

The Phase I ESA indicated that no ASTs or USTs were observed on the project site during the site reconnaissance. In addition, the ERD record search found no records indicating that any ASTs or USTs are present or were formerly present on the project site.

4.6.3 - Regulatory Framework

Federal

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

State

California Health and Safety Code

The California Environmental Protection Agency has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, et seq. incorporate the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

Local**City of San Ramon General Plan**

The City of San Ramon General Plan establishes the following relevant policies related to hazards and hazardous materials:

- **Policy 7.5-I-2:** Provide and promote opportunities to reduce waste at home and in businesses, and make possible the safe disposal of hazardous materials.
- **Policy 8.6-I-5:** Evaluate new commercial and industrial development for potential handling, storage, and transport of hazardous materials to minimize public exposure to toxic air contaminants.
- **Policy 9.2-I-4:** Promote the cooperation between police, fire, and emergency medical services, and support the required training of all personnel who may respond to an emergency involving hazardous materials.
- **Policy 9.2-I-5:** Support the formation of a regional hazardous materials team consisting of specially trained personnel and equipment. Require the clean up of sites contaminated with hazardous substances. Support and implement policies contained in the Contra Costa County Hazardous Waste Management Plan that encourage and assist the reduction of hazardous waste from businesses and homes in San Ramon.
- **Policy 9.2-I-8:** Require businesses generating hazardous waste to pay necessary costs for local implementation of programs specified in the County Hazardous Waste Management Plan, as well as the costs associated with emergency response services for a hazardous materials release.
- **Policy 9.2-I-9:** Establish an ordinance specifying routes for transporting hazardous materials.

Contra Costa County Hazardous Materials Program

Contra Costa County's Hazardous Materials program serves area residents by responding to emergencies and monitoring hazardous materials. The 2005 Contra Costa County Hazardous Materials Area Plan is a comprehensive document that includes the identification of hazardous materials incident planning, operations, organization, and responsibilities for handling a hazardous materials incident that may impact Contra Costa County. It also provides support for hazardous materials management in Contra Costa County, including the coordination of data management, business plans, and facility inspections. The Plan is a dynamic document designed to protect human health and the environment through hazardous materials emergency planning and community right-to-know programs within the County.

The Contra Costa Health Services - Hazardous Materials Programs (CCHS-HazMat) is authorized by the California Environmental Protection Agency to be the Certified Unified Program Agency (CUPA) for all cities and unincorporated areas within Contra Costa County. As the CUPA, CCHS-HazMat is

the local agency responsible for administering the six elements of the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program).

San Ramon Emergency Response Plan

The City of San Ramon adopted an Emergency Response Plan in 1998 to address potential impacts from a major earthquake, hazardous materials incident, flood, national security emergency, wildfire, landslide, and dam failure. The objectives of the plan are to reduce injury and loss of life and property through effective management of emergency forces. The plan identifies the City's emergency planning, organizational, and response policies and procedures, integrating and coordinating these with other governmental levels when required.

4.6.4 - Methodology

Michael Brandman Associates (MBA) prepared a Phase I ESA to document potential hazardous conditions on the project site and surrounding land uses. The Phase I ESA consisted of a review of local, State, and federal regulatory agency lists as compiled by EDR; a review of historic aerial photographs and topographic maps; a City and County Agency review; completion of questionnaires by the current landowners; and site reconnaissance.

MBA submitted questionnaires to Sunset Development Company and the City of San Ramon about historic uses of the four parcels comprising the project site. Responses were provided in written form. MBA personnel performed site reconnaissance of the four parcels and surrounding land uses on April 19, 2007 to document existing conditions and potential environmental hazards. MBA reviewed historic aerial photographs and topographical maps to identify past uses of the project site and its surroundings.

4.6.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

- e.) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area? (Refer to Section 7, Effects Found Not To Be Significant.)
- f.) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (Refer to Section 7, Effects Found Not To Be Significant.)
- g.) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h.) 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? (Refer to Section 7, Effects Found Not To Be Significant.)

4.6.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1: **The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions.**

Impact Analysis

This impact is associated with hazards caused by the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, State, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. No significant impacts would occur during construction activities.

The commercial, residential, office, and civic uses envisioned by the proposed project would not be large-quantity users of hazardous materials. Small quantities of hazardous materials would be used onsite, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. These substances would be stored in maintenance areas and would comply with all applicable storage, handling, usage, and disposal requirements. The potential risks posed by the use and storage of these

hazardous materials are primarily limited to the immediate vicinity of the materials. Transport of these materials would be performed by commercial vendors who would be required to comply with various federal and State laws regarding hazardous materials transportation. As such, they are not expected to expose human health or the environment to undue risks associated with their use.

Project tenants would be required to submit a Hazardous Materials Business Plan to the Contra Costa Health Services Hazardous Materials Program if they intend to store 55 gallons of hazardous materials as a liquid, 500 pounds of hazardous materials as a solid, or 200 cubic feet of hazardous materials as a gas onsite. Compliance with the CUPA program is part of building permit and fire clearance review for all tenant improvements.

In summary, the proposed project would not have the potential to create a significant hazard to the public or the environment from routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Prior Contamination

Impact HAZ-2:	The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would not create a potential hazard to the public and the environment.
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Impact Analysis

Impact Analysis

This impact assesses the proposed project's potential to expose human health or the environment to contamination, both onsite and on nearby land uses.

Project Site

The Phase I ESA record search indicated that none of the four parcels comprising the project site is listed on any federal, State, or local databases of hazardous materials sites. Site reconnaissance found that there was no evidence of contamination or potential sources of contamination (e.g., soil staining, illegal dumping, USTs, ASTs, electrical transformers). Impacts would be less than significant.

Surrounding Land Uses

Several sites adjacent to or close to the project site are listed on federal, State, or local databases of hazardous materials sites. This includes Chevron Park, The Shops at Bishop Ranch, the AT&T campus, Bishop Ranch 3, San Ramon Valley Fire Protection District Station #34, the Market Place,

and Bishop Ranch 1. Of these sites, only the fire station and the Valero gas station in the Market Place had documented contamination, which in both cases was from leaking USTs. Both of these sites have been abated and do not pose a threat to human health or the environment. The remaining sites are listed on databases of hazardous materials users, which only indicates that such materials are currently or may have been previously used onsite; there are no records indicating that contamination has occurred. Site reconnaissance also found that there was no evidence of contamination or potential sources of contamination (e.g., soil staining, illegal dumping, USTs, ASTs, electrical transformers). Therefore, surrounding land uses would not pose a contamination hazard to the proposed project. Impacts would be less than significant.

Regarding the significance of EMF exposure from the 230-kV PG&E power lines east of Parcels 1A and 3A, it would be speculative to make such a determination because of the scientific uncertainty that surrounds the issue. For the purposes of disclosure, the PG&E power lines pass near existing residential land uses (e.g., the Reflections Condominiums) at distances of less than 50 feet, and the proposed project's nearest residential units would be more than 100 feet from the power lines. Given these distances, the potential for the proposed project to be exposed to EMFs would not be any greater than existing exposure levels.

Demolition Activities

The proposed project would result in the demolition of Bishop Ranch 2 and the existing surface parking areas on Parcels 1A and 1B. Bishop Ranch 2 was developed in the early 1980s after the federal bans on asbestos-containing and lead-based building materials were imposed. Therefore, the Bishop Ranch 2 structures do not contain hazardous building materials and would not expose the public or environment to hazards associated with those materials. The surface parking areas on Parcels 1A and 1B consists of asphalt-paved areas with landscaped islands. The removal of these areas would also not expose the public or environment to hazards associated with hazardous building materials. Impacts would be less than significant.

Note that the Chevron Corporation utility corridor located south of Parcel 1A would not be affected by project activities, which precludes the possibility of exposure of the public or the environment to PCBs.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Exposure of Schools to Hazardous Materials

Impact HAZ-3: The proposed project would not expose Iron Horse Middle School or Central Park to hazardous emissions, materials, substances, or waste.

Impact Analysis

Iron Horse Middle School is located with 0.25 mile of Parcel 3A. The school's physical education classes use the athletic fields in neighboring Central Park, and, therefore, the park is considered part of the school environment. The primary hazardous material issue of concern is diesel particulate matter from heavy equipment and trucks, which would be emitted during construction and operational activities.

Construction Emissions

Project construction activities on Parcel 3A would occur within 100 feet of the nearest athletic field in Central Park. Construction activities would include the use of heavy diesel-power equipment (such as scrapers, graders, tractors, front-end loaders, off-road trucks) that would emit diesel particulate matter, a known carcinogen. As discussed in Section 4.2, Air Quality, adverse health effects from diesel particulate matter requires regular exposure to concentrated emissions over a sustained period. Construction activities would occur for a period of less than 18 months, with the nearest activities being 100 feet from Central Park. Most of the construction activities would occur at distances greater than 1,000 feet from the school or the park's athletic fields. Given the temporary nature of construction activities and the distance from the source to the receptor, construction emissions of diesel particulate matter would not expose Iron Horse Middle School or Central Park to substantial emissions of hazardous materials. Impacts would be less than significant.

Operational Emissions

Operational activities associated with the proposed project would result in regular truck deliveries by diesel-powered tractor-trailers. The two potential anchor retail stores, the hotel, the cinema, the in-line retail shops, Bishop Ranch 1A, and City Hall would receive regular deliveries or pick-ups from trucks. The nearest loading and unloading areas to Central Park would be at a distance of approximately 300 feet and would be associated with the cinema on Block B and the potential anchor retail store on Block H. Generally, deliveries would occur at different times during the day and would not be expected to occur more than 10 times daily for any project use. In addition, State law prohibits the idling of diesel trucks for more than 5 minutes in loading areas. Because of the distribution of deliveries throughout the day, the distance between the nearest loading docks at the nearest school-related receptor, and the prohibition on extended idling, operational emissions of diesel particulate matter would not expose Iron Horse Middle School or Central Park to substantial emissions of hazardous materials. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts with Emergency Response or Evacuation Plans

Impact HAZ-4: **The proposed project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.**

Impact Analysis

The proposed project consists of a large-scale, mixed-use development located in an existing urbanized part of the City of San Ramon. The project site is located in an area where existing emergency response times for police and fire meet adopted standards. The proposed project does not contain any characteristics (e.g., permanent road closures) that would impair or otherwise interfere with emergency response, evacuation, or the policies of the San Ramon Emergency Response Plan. Moreover, the proposed project includes a new, state-of-the art, 12,000- to-15,000-square-foot police department that is expected to result in improved emergency response times to all portions of the City. This is a beneficial aspect of the proposed project. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

4.7 - Hydrology and Water Quality

4.7.1 - Introduction

This section describes the existing setting regarding hydrology and water quality and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based, in part, on information contained in the Preliminary Hydrology Report, prepared in May 2007 by RBF Consulting, included in this EIR as Appendix F.

As explained in Section 1, Introduction, this project-level Draft Subsequent Environmental Impact Report (DSEIR), where applicable, tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts related to hydrology and water quality were less than significant after mitigation in Section 4.13 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all impacts related to hydrology and water quality were less than significant after the implementation of mitigation in Section 4.5 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project and new analysis is provided for potential impacts not previously considered in those documents.

4.7.2 - Environmental Setting

Climate

The site is located within the San Ramon Valley situated southeast of Mount Diablo and the Black Hills of Contra Costa County in the north-central Coastal Range of California. The climate characteristics of the site reflect the general Mediterranean climate of the eastern Bay Area region of California. According to the Contra Costa County hydrologic design standards, the average annual rainfall for the site is 21.0 inches per year. According to data provided by the Western Regional Climate Center, the 10-year, 24-hour estimated maximum precipitation amount is 4.5 inches and the 100-year, 24-hour maximum precipitation amount is 6.5 inches for the project area.

Regional Hydrology

A review of the Contra Costa County Watershed Atlas indicates that the project site is located within the upper portion of the South San Ramon Creek Watershed, which is part of the larger Alameda Creek Watershed. The upper basin of the Alameda Creek Watershed encompasses approximately

630 square miles and is divided into the Livermore and Sunol drainage units. The major streams within Livermore drainage unit are the Arroyo del Valle, Arroyo Mocho, and San Ramon and Tassajara creeks. The Arroyo del Valle and Arroyo Mocho have the largest drainage areas and converge on the floor of the Livermore-Amador Valley, south of the project area, to form the Arroyo de la Laguna.

Locally, all surface water originating from portions of the site drains into South San Ramon Creek flows in a southerly direction through the southern portion of the San Ramon Valley and into the Arroyo de la Laguna. The Arroyo de la Laguna continues to the south, roughly parallel to Interstate 680 (I-680), where it confluences with Alameda Creek near Sunol. Alameda Creek flows to the west from this location for approximately 4 miles before draining into San Francisco Bay.

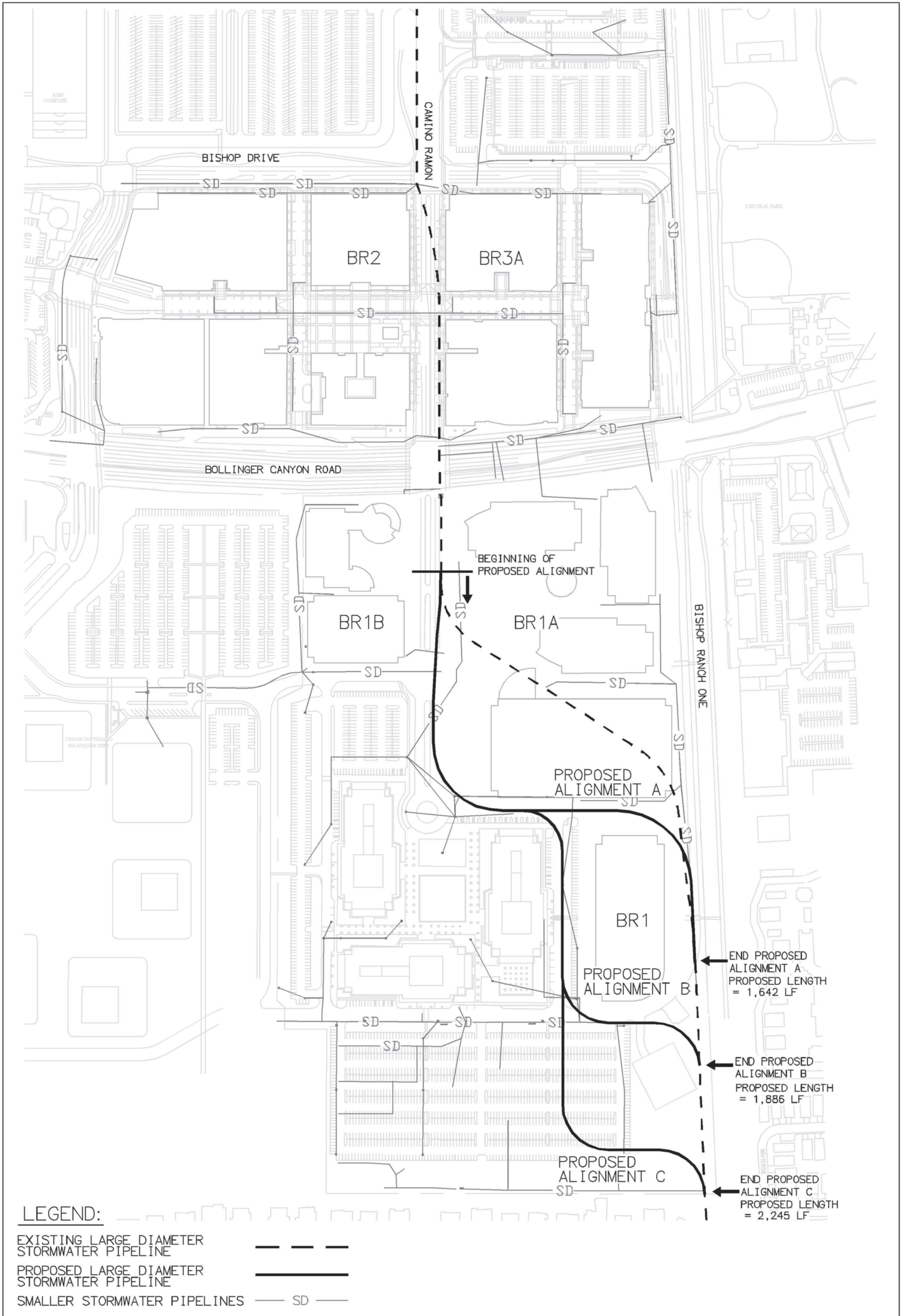
Localized Drainage

The project site is generally level with no prominent topographical characteristics. The southern portion of the San Ramon Valley naturally slopes to the southeast at a grade of approximately 1 percent. South San Ramon Creek is generally a channelized water feature that is piped underground at several locations to facilitate urban development. Under existing conditions, the existing developed and undeveloped portions of the project site drain into local catch basins or storm drain inlets, which enter into the City's stormwater conveyance system. As shown in Exhibit 4.7-1, the stormwater conveyance system flows to the south and consists of a large diameter pipeline that ranges in size from 72 to 96 inches in diameter. The pipeline enters the site from the north along Camino Ramon and continues south off the site adjacent to Iron Horse Trail. This large-diameter pipeline eventually daylights to South San Ramon Creek, a large concrete lined channel, at a point near Montevideo Drive and the Iron Horse Trail.

As indicated in the Preliminary Hydrology Report, the project site has no significant existing infrastructure for stormwater detention and limited infrastructure for the enhancement of stormwater quality. Some locations contain storm drain inlets surrounded by grassy areas; however, much of the stormwater enters the collection system immediately after flowing over paved or other impermeable areas with minimal or no infiltration provided.

Soil Hydraulic Characteristics

Harding Lawson Associates conducted several geotechnical investigations throughout the Bishop Ranch Business Park, including the proposed site, which is available in Appendix D of this DSEIR. These reports investigated, among other things, the soil conditions present onsite. These investigations indicate that onsite soils are generally characterized by low hydraulic conductivity or poor drainage with very low surface permeability. No percolation tests were performed as part of these investigations; however, soil percolation rates for clayey and silty substrates typically in the range of 0.001 to 0.01 centimeters per second. Note that the geotechnical investigations were performed prior to the development of certain parcels (e.g., Parcels 1A, 1B, and 2) and subsequent grading and soil engineering activities have changed the surface and subsurface conditions on those



Source: RBF Consulting, May 2007.



Michael Brandman Associates

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Exhibit 4.7-1 Drainage Conveyance Alignments

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sites. Therefore, the geotechnical investigation findings related to percolation should be considered in that context.

Flooding

According to the most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the project area, all four parcels that constitute the project site are located within the Zone X designation, which signifies locations outside the 100-year and 500-year floodplains. As a result, the project site is not at risk of flooding during a 100-year storm intensity. The FIRM panels showing the Zone X designation are available in Appendix F.

Groundwater

The site is located in the San Ramon Valley Groundwater Basin as described by the San Francisco Regional Water Quality Control Board (RWQCB) Basin Plan. The Basin has limited existing municipal, domestic, and agricultural water supply use according to the RWQCB's Basin Plan Report. Similar to the Basin Plan Report, the California Department of Water Resources published Bulletin 118 in 2003. Bulletin 118 details the groundwater basins throughout California. According to Bulletin 118, there are no historical records of groundwater elevations in the San Ramon Valley Groundwater Basin. Results from Harding Lawson Associates' geotechnical investigations indicate that groundwater across the site ranges from 7 to 20 feet below the surface.

Water Quality

Surrounding land uses largely affect surface water quality, with both point-source and nonpoint-source discharges contributing contaminants to surface waters. A majority of the surrounding land area consists of existing business parks, high-density residential developments, and scattered undeveloped lots. Pollutant sources in residential areas and business parks include streets, rooftops, exposed earth at construction sites, automobiles, and landscaped areas. Pollutants of concern in discharges from these uses include certain heavy metals, excessive sediment production from erosion, petroleum hydrocarbons from sources such as motor oil, certain pesticides associated with the risk of acute aquatic toxicity, excessive nutrient loads, and trash.

No water quality data were acquired as part of this DSEIR and, therefore, no site-specific data are available to characterize existing surface water quality conditions for the project area. However, based on numerous studies conducted by the U.S. Environmental Protection Agency (EPA) to characterize the nature of urban stormwater runoff—including the National Urban Runoff Program (NURP), the United States Geologic Survey Urban Stormwater Database and the Federal Highway Administration study of stormwater runoff loadings from highways—sufficient data exists to characterize the basic nature of stormwater discharges based on land use. More recently, University of Alabama and the Center for Watershed Protection were awarded an EPA Office of Water 104(b)3 grant in 2001 to collect and evaluate stormwater data from a representative number of NPDES municipal separate storm sewer system (MS4) stormwater permit holders. This dataset is referred to as the National Stormwater Quality Database (NSQD), which provides median event concentration

values for associated land use classes and typical water quality parameters. Table 4.7-1 provides a summary of the values contained in NSQD for selected land uses.

Table 4.7-1: Event Median Concentrations for Selected Parameters in the NSDQ, Version 1.

Parameter	Overall	Residential	Commercial	Freeways	Open Space
Area (acres)	56.0	57.3	38.8	1.6	73.5
Percent Impervious	54.3	37.0	83.0	80.0	2.0
Precipitation Depth (inches)	0.47	0.46	0.39	0.54	0.48
Total Suspended Solid (mg/L)	58	48	43	99	51
Biological Oxygen Demand (mg/L)	8.6	9.0	11.9	8.0	4.2
Chemical Oxygen Demand (mg/L)	53	55	63	100	21
Fecal Coliform MPN/100mL)	5,081	7,750	4,500	1,700	3,100
Ammonia (NH ₃) (mg/L)	0.44	0.31	0.50	1.07	0.30
(Nitrite + Nitrate) (NO ₂ + NO ₃) (mg/L)	0.6	0.6	0.6	0.3	0.6
Nitrogen, Total Kjeldahl (mg/L)	1.4	1.4	1.6	2.0	0.6
Phosphorous, total (mg/L)	0.27	0.30	0.22	0.25	0.25
Cadmium, total (µg/L)	1.0	0.5	0.9	1.0	0.5
Copper, total (µg/L)	16.0	12.0	17.0	35.0	5.3
Lead, total (µg/L)	16	12	18	25	5
Nickel, total (µg/L)	8.0	5.4	7.0	9.0	ND
Zinc, total (µg/L)	116	73	150	200	39
ND = not detected, or insufficient data to present as a median value. Source: Center for Watershed Protection, 2004.					

4.7.3 - Regulatory Framework

Federal

Clean Water Act

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Important applicable sections of the Act are as follows:

- Section 301 prohibits the discharge of any pollutant by any person, except as in compliance with Sections 302, 306, 307, 318, 402, and 404 of the CWA. Sections 303 and 304 provide water quality standards, criteria, and guidelines.

- Section 401 requires an applicant for any federal permit that proposes an activity which may result in a discharge to “waters of the United States” to obtain certification from the State that the discharge will comply with other provisions of the Act. Certification is provided by the RWQCBs.
- Section 402 establishes the National Pollution Discharge Elimination System (NPDES) a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. This permit program is administered by the RWQCB, and discussed in detail below.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

Potential impacts on jurisdictional waters and wetlands are evaluated in Section 4.3, Biological Resources.

National Flood Insurance Program

FEMA administers the National Flood Insurance Program’s (NFIP) Community Rating System to provide subsidized flood insurance to communities that exceed the minimum FEMA regulations. Insurance premiums are adjusted to reflect the level of floodplain management in regards to reducing flood damage to existing buildings, limiting development in floodplains, protecting new buildings beyond the minimum NFIP protection level, assisting insurance agents obtain flood data, and helping citizens identify their flood risk through outreach and direct communication. FEMA issues flood insurance rate maps for communities participating in the NFIP that delineate flood hazard zones within the community. Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics, and requires:

- Leadership and action to reduce the risk of flood loss and minimize the impact of floods on human safety, health, and welfare
- Consistency with the standards and criteria of the NFIP
- Restoration and preservation of the natural and beneficial floodplain values

State

Porter-Cologne Water Quality Control Act

The State of California’s Porter-Cologne Water Quality Control Act (California Water Code Section 13000, et seq.) provides the basis for water quality regulation within California. The Act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the State. Waste discharge requirements (WDRs) resulting from the Report are issued by the RWQCB, as discussed further below. In practice, these requirements are typically integrated with the NPDES permitting process.

The State Water Resources Control Board (SWRCB) carries out its water quality protection authority through the adoption of specific Water Quality Control Plans (Basin Plans). These plans establish water quality standards for particular bodies of water. California water quality standards are composed of three parts: the designation of beneficial uses of water, water quality objectives to protect those uses, and implementation programs designed to achieve and maintain compliance with the water quality objectives.

The San Francisco Bay RWQCB is responsible for the Basin Plan that covers the portions the nine-county Bay Area region nearest to San Francisco Bay. The RWQCB implements management plans to modify and adopt standards under provisions set forth in section 303(c) of the Federal CWA and California Water Code (Division 7, Section 13240). Under Section 303(d) of the 1972 CWA, the State is required to develop a list of waters with segments that do not meet water quality standards.

Beneficial Uses and Water Quality Objectives

The RWQCB is responsible for the protection of beneficial uses of water resources within the San Francisco Bay Area region. Beneficial uses are the desired resources, services, and qualities of the aquatic system that are supported by achieving and protecting high-water quality. The Regional Board adopted the most recent Basin Plan on December 22, 2006 for the 4,603-square-mile basin that sets forth the beneficial uses identified for water bodies within the region. The Basin Plan was prepared in compliance with the federal CWA and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes beneficial uses for major surface waters and their tributaries, water quality objectives that are intended to protect the beneficial uses of the Basin, and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Basin.

Additionally, water quality objectives for all surface waters in the region have been set concerning bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, population and community ecology, pH, salinity, sediment, settleable material, suspended material, sulfide, tastes and odors, temperature, toxicity, turbidity, and ammonia. Objectives for specific chemical constituents are additionally regulated, depending upon the beneficial use of the water body. Specific water quality objectives and standards for surface waters are outlined in the Basin Plan.

The SWRCB has adopted a Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. This policy provides implementation measures for numerical criteria contained in the California Toxics Rule, promulgated in May 2000 by the U.S. EPA. When combined with the beneficial use designations in the Basin Plan, these documents establish statewide water quality standards for toxic constituents in surface waters.

Total Maximum Daily Loads

A total maximum daily load (TMDL) refers to the amount of a specific pollutant a river, stream, or lake can assimilate and still meet federal water quality standards as provided in the CWA. A TMDL

accounts for all sources of pollution, including point sources, non-point sources, and natural background sources. Section 303(d) requires that regulatory agencies determine TMDLs for all water bodies that do not meet water quality standards, and the Section 303(d) list of impaired water bodies described earlier provides a prioritization and schedule for development of TMDLs for the State.

The SWRCB, in compliance with the Section 303(d) of the Clean Water Act [33 USC Section 1313(d)] prepared, and the EPA approved, a 2006 list of impaired water bodies in the State of California. The list includes a priority schedule for the development of TMDLs for each contaminant or “stressor” impacting the water body. Alameda Creek and the Arroyo De La Laguna are identified in the 2006 California Section 303(d) List and TMDL Priority Schedule as impaired water bodies for diazinon. The U. S. government outlawed the sale of diazinon on December 31, 2004, and, therefore, the presence of diazinon in conjunction with the project is not anticipated.

General Construction Stormwater NPDES Permit

The San Francisco Bay RWQCB administers the NPDES stormwater permitting program in the nine-county Bay Area for construction activities. Construction activities disturbing 1 acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). For qualifying projects, the project applicant must submit a Notice of Intent (NOI) to the RWQCB to be covered by the General Construction Permit prior to the beginning of construction. The General Construction Permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which must also be completed before construction begins. Implementation of the SWPPP starts with the commencement of construction and continues through the completion of the project. Upon completion of the project, the applicant must submit a Notice of Termination to the RWQCB to indicate that construction is completed.

The disturbance areas associated with construction of structures and facilities associated with the project is anticipated to exceed the threshold requiring coverage under the General Construction Permit.

Local

Contra Costa Countywide NPDES Municipal Stormwater Permit

The San Francisco Bay RWQCB adopted Order No. 99-058 establishing the Contra Costa County Municipal Stormwater (MS4) Permit in 1999. The City is a co-permittee on the Countywide MS4 Permit and is required to implement Provision C.3 for all new development that discharges into the City’s storm drain system. In 2003, the San Francisco Bay RWQCB adopted Order No. R2-2003-0022, which amended Provision C.3 of the permit to reduce the project size threshold to 10,000 square feet. More recently, Order No. R2-2006-0050 was adopted and presents revised flow-control requirements for direct and indirect infiltration best management practices (BMPs). The Contra Costa Clean Water Program’s (CCCWP) Stormwater C.3 Guidebook provides additional information on the permit review process and requirements for project submittals.

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following policies related to hydrology and water quality:

- **Policy 8.7-G-1:** Encourage the implementation of water quality and conservation programs and measures by San Ramon employers, residents, and service providers.
- **Policy 8.7-I-1:** Encourage State and regional agencies to monitor groundwater supplies and take steps to prevent overuse, depletion, and toxicity.
- **Policy 8.7-I-2:** Require new development to be equipped with water conservation devices, including the possibility of dual water systems.
- **Policy 8.7-I-3:** Continue to implement and enforce provisions of the Water Conservation and Landscape Ordinance 218.
- **Policy 8.7-I-4:** Support the application of reclaimed water to reduce the demand on municipal water supplies.
- **Policy 8.7-I-5:** Work with DERWA (Dublin San Ramon Services District / East Bay Municipal Utility District Recycled Water Authority) to encourage and promote water reclamation projects in the City of San Ramon.
- **Policy 8.7-I-6:** Continue participation in the Contra Costa Clean Water Program to reduce storm water pollution and protect the water quality of the City's waterways.
- **Policy 9.1-I-10:** Control erosion of graded areas with revegetation or other acceptable methods.
- **Policy 9.3-I-2:** Require new development to prepare hydrologic studies to assess storm runoff impacts on the local and subregional storm drainage systems and/or creek corridors.
- **Policy 9.3-I-3:** Require new development to provide for the perpetual funding and ongoing maintenance of detention basins. Maintenance may be performed by the City under contract, by a private entity, or by another public agency.
- **Policy 9.3-B-1:** Eliminate hazards caused by local flooding through improvements to the storm drain system and/or creek corridors.
- **Policy 9.3-G-1:** Protect the community from risks to lives and property posed by flooding and stormwater runoff.

4.7.4 - Methodology

The impact analysis analyzes the project in relation to its possible impacts on local drainage patterns, water quality, local groundwater resources, and South San Ramon Creek. The impact analysis focuses on foreseeable changes to the existing conditions described above in the context of the

significance criteria presented below. Impacts to hydrology are quantitatively assessed, while those for water quality are generally qualitative. Impacts of the project are identified for both the construction and operation of all project facilities, including the staging areas required for these facilities.

4.7.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Violate any water quality standards or waste discharge requirements (WDRs)?
- b.) 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?
- c.) 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?
- d.) 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?
- e.) 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?
- f.) Otherwise substantially degrade water quality?
- g.) 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? (Refer to Section 7, Effects Found Not To Be Significant.)
- h.) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows? (Refer to Section 7, Effects Found Not To Be Significant.)
- i.) 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? (Refer to Section 7, Effects Found Not To Be Significant.)
- j.) Inundation by seiche, tsunami, or mudflow? (Refer to Section 7, Effects Found Not To Be Significant.)

4.7.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Short-Term Construction Water Quality

Impact HYD-1: Construction activities associated with the proposed project could adversely impact water quality.

Impact Analysis

Development of the proposed project would require extensive construction and grading. During these activities, there would be the potential for surface water to carry sediment from onsite erosion and small quantities of pollutants into the stormwater system and local waterways. Soil erosion may occur along project boundaries during construction in areas where temporary soil storage is required. Small quantities of pollutants have the potential for entering the storm drainage system, thereby potentially degrading downstream water quality.

Construction of the proposed project would also require the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances would be utilized during construction. An accidental release of any of these substances could degrade the water quality of the surface water runoff and add pollution into the drainage system.

The NPDES stormwater permitting programs regulate stormwater quality from construction sites. Under the NPDES permitting program, the preparation and implementation of SWPPPs are required for construction activities more than 1 acre in size. The SWPPP must identify potential sources of pollution that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement BMPs that ensure the reduction of these pollutants during stormwater discharges. BMPs for stormwater quality treatment are classified as structural and non-structural. Structural measures may include biofilters, wetlands, infiltration basins, or mechanical structures designed to remove pollutants from stormwater. Non-structural measures such as street sweeping, public education, or hazardous substance recycling centers are preventive measures intended to control the source of pollutants.

Prior to construction grading, the applicant must file an NOI to comply with the General NPDES Construction Permit issued to the RWQCB and prepare the SWPPP, which addresses the measures that would be included in the project to minimize and control construction and post-construction runoff to the “maximum extent practicable.” However, without these documents available for review as part of the DSEIR, the City is unable to determine their adequacy in achieving applicable water quality standards. For this reason, the implementation of the prescribed mitigation would be required to ensure that the project SWPPP and Grading Plan include measures necessary to minimize water quality impacts as a result of project construction.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-1a Prior to the issuance of grading permits, the project applicant shall prepare and submit a SWPPP and Grading Plan to the City of San Ramon that identify specific actions and BMPs to prevent stormwater pollution from construction sources. The plans shall identify a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The applicant shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories:

- Soil stabilization practices
- Dewatering practices (if necessary)
- Sediment and runoff control practices
- Monitoring protocols
- Waste management and disposal control practices

Once approved by the City, the applicant's contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the SWPPP and Grading Plan.

MM HYD-1b The City shall ensure that the project SWPPP identifies pollutant sources that could affect the quality of stormwater discharges from the construction site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project construction sites. To protect receiving water quality, the SWPPP shall include, but is not limited to, the following elements:

- Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas.
- No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.
- Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures. Of critical importance is the protection of existing catch basins that drain to San Ramon Creek.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.

- BMP performance and effectiveness shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.
- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.

Level of Significance After Mitigation

Less than significant impact.

Long-Term Operational Water Quality

Impact HYD-2: Land use activities associated with the proposed project could adversely impact water quality.

Impact Analysis

Development of the proposed project would create the potential for two substantial water quality effects. First, the existing vegetated pervious ground cover on undeveloped lots would be converted to impervious surfaces, including the rooftops and parking lots, which can neither absorb water nor remove pollutants. Secondly, urban development creates new pollution sources as human population density increases and brings with it proportionately higher levels of automobile use, landscaping, etc. Examples of such pollutants and their respective sources are heavy metals, such as copper from brake pad wear and zinc from tire wear; oil and grease from engines; and fertilizers and pesticides from landscaping. As a result of these two changes, the runoff leaving the developed urban area is significantly greater in volume, velocity, and pollutant load than the pre-development runoff from the same area. Further, these pollutants would be efficiently conveyed through existing drainage infrastructure and discharged into South San Ramon Creek.

In response to these concerns, the Preliminary Hydrology Report for the project (refer to Appendix F) describes a system for managing stormwater pollutants and peaks flows generated from the project on a flow-through basis. The project stormwater management system would provide an integrated management plan consisting of multiple BMPs, including green roofs, bioswales, permeable pavement, and stormwater detention within the swales. Preliminary locations for each of these facilities are provided in Exhibits 4 through 6 in Appendix F, but they require more advanced hydrologic modeling to ensure accurate sizing and facility requirements.

Rather than specifying a design storm, the MS4 permit criteria for treatment facilities target treatment of 80 percent of average annual runoff, since a large portion of annual runoff is produced by small storms that occur many times a year. Consistent with the C.3 Guidebook, the project flow-based IMP includes treatment facilities with a preliminary design to accommodate a 0.2-inch/hour design rainfall

intensity to ensure treatment of approximately 80 percent of the average annual runoff. Based on this design concept, it is reasonable to conclude the project would comply with applicable C.3 provisions.

However, given its preliminary nature, the Preliminary Hydrology Report does not provide a clear indication of the effectiveness of the proposed treatment measures in treating the anticipated and potential pollutants of concern generated from the project as provided in Table 4.7-1. These pollutants include pathogens, heavy metals, nutrients, pesticides, organic compounds, sediments, trash and debris, oxygen demanding substances, and oil and grease. The effectiveness of bioswales, green roofs, and permeable pavement in treating each of these pollutants varies, contingent on numerous factors, and in certain instances can result in degradation of shallow groundwater.

The treatment capacity of the proposed BMPs are in many instances not capable of providing complete treatment of each of these pollutants, even if runoff is routed through multiple BMPs. For example, the limited data that are available for bioswales suggest relatively high removal rates for some pollutants, but minimal removal for some bacteria and soluble nutrients. In addition, the removal efficiency of bioswales at reducing particulate concentrations of heavy metals is variable and may, under ideal circumstances, achieve only 50 percent removal. Less information is available regarding the treatment effectiveness of porous or permeable pavement and green roof technologies, which are most effective in minimizing peak flows.

In addition to these considerations, based on the local soil conditions present, even with the addition of up to 1.5 feet of engineered fill, it is uncertain whether the proposed bioswales will provide the level of treatment anticipated. The CCCWP uses the 0.2-inch/hour criterion to develop a consistent Countywide sizing factor for “dry” swales, planters, and bioretention areas when used for stormwater treatment only (i.e., not for flow control) and is based on facilities constructed with a specified sandy loam mix with an infiltration rate of at least 5 inches per hour. As provided in Harding Lawson Associates’ geotechnical investigations for the Bishop Ranch Business Park, the soil conditions in the upper 3 to 5 feet consist of hard, desiccated clays that transition to generally very stiff to hard silty clays in the upper 6 to 9 feet and, medium-stiff to stiff silty clays between 9 and 30 feet.

The State suggests that a percolation rate of 0.5 inch per hour or more, and a soil layer of 4 feet or more are critical for success of infiltration BMPs. As a result, the performance of infiltration BMPs may be limited by poor soil permeability, which for clayey and silty substrates may be as low as 0.001 to 0.01 centimeters per second. Therefore, using the soils as a means to percolate stormwater could be ineffective since local soils would tend to restrict vertical movement. For this reason, permeability of onsite soils must be verified. In addition, infiltration BMPs can experience reduced infiltrative capacity and even clogging due to excessive sediment accumulation, thereby potentially requiring frequent maintenance to restore the infiltrative capacity of the system.

The incorporation of infiltration technologies also carries the potential to subject local groundwater resources to urban pollutants that may be present in runoff by creating a direct, more efficient

conduit. Unmitigated, urban pollutants could eventually migrate laterally offsite or concentrate in the local shallow aquifer. For these reasons, the implementation of the prescribed mitigation would be required to minimize potential water quality impacts from nonpoint sources of pollution to the maximum extent practicable and a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-2a The applicant shall develop and implement a Landscaping Management Plan (LMP) for landscaped areas with the goal of reducing potential discharge of herbicides, pesticides, fertilizers, and other contaminants to local waterways. All contractors involved in project-related landscaping conducted during the individual phases of development, as well as maintenance of landscaping following project completion, shall complete their work in strict compliance with the LMP. The applicant shall be responsible for ensuring that requirements of the LMP are provided to and instituted by future project tenants following project completion. The LMP shall be prepared by a licensed landscape architecture firm with experience in methods to reduce or eliminate the use of landscape chemicals that could cause adverse effects to the environment. At a minimum, this LMP shall:

1. Require that pesticides and fertilizers not be applied in excessive quantities, and only applied at times when rain is not expected for at least two weeks, in an effort to minimize leaching and runoff into the storm drainage system.
2. Encourage the use of organic fertilizers and mulching of landscaped areas to inhibit weed growth and reduce water demands.
3. Utilize native, perennial, drought-tolerant vegetation to minimize irrigation needs.
4. Specify the maintenance measures to be used (e.g., mowing) and will specify an application schedule for all fertilizer amendments and pesticide applications.
5. Identify a list of preferred herbicides and pesticides and instances in which their use would be appropriate and the associated application rate.

MM HYD-2b Prior to the issuance of a site development permit, the project applicant shall provide supporting documentation demonstrating the effectiveness of infiltration devices for stormwater treatment and enter into a Stormwater Management Facilities Operations and Maintenance Agreement with the City of San Ramon. In accordance with RWQCB requirements, proposed infiltration devices shall meet, at a minimum, the following conditions:

1. Pollution prevention and source control measures shall be implemented at a City-approved level to protect groundwater quality at sites where infiltration devices are to be used.
2. Infiltration devices shall include an enforceable maintenance schedule to ensure they are adequately maintained over the long term to maximize pollutant removal capabilities.
3. Onsite percolation tests will be conducted for all sections of the project site where infiltration technologies are proposed to confirm adequate soil percolation.
4. The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 5 feet.

If, after further evaluation, the proposed infiltration devices prove to be infeasible for portions or the entirety of the project site, the applicant shall revise the plan to include one or a combination of the following stormwater treatment devices:

- Check dams with the vegetated swales
- Placement of vegetated filter strips parallel to the top of the channel banks of the bioswales
- Retention/Detention ponds
- Retention rooftops
- Oil/grease separators for parking areas
- Compost berms
- Street sweeping

The project applicant shall also prepare and submit an Operations and Maintenance Agreement to the City identifying procedures to ensure that stormwater quality control measures work properly during operations.

Level of Significance After Mitigation

Less than significant impact.

Groundwater

Impact HYD-3: The project may substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

Impact Analysis

Water service for the project would be provided via existing water mains owned and maintained by the East Bay Municipal Utility District (East Bay MUD) and, therefore, no new wells are proposed as part of the project. East Bay MUD currently holds a surplus of water in relation to existing demand; therefore, no new project-related demand for regional or local groundwater resources is anticipated.

As provided in the setting discussion, groundwater occurs at depths of 7 to 20 feet below the ground surface in the project area. The placement of project-related structural foundations may require construction dewatering, which could result in localized and temporary lowering of the water table in the vicinity of pumping. However, as there is no residential development reliant on well water in the immediate vicinity of the project site, any localized drawdown resulting from temporary dewatering operations would not adversely affect local wells. Further, given the minimal level of pumping expected, groundwater levels would be expected to stabilize shortly after construction. If dewatering is required, the project contractor would be required to conduct operations in accordance with RWQCB General Order No. 5-00-175 for NPDES General Permit No. CA G995001. This General Order and NPDES permit cover WDRs for dewatering and other low-threat discharges to surface water.

Onsite soils are relatively impermeable, thereby providing minimal contribution to localized groundwater recharge. In addition, the extent of existing impervious surface coverage combined with the low soil hydraulic conductivity, further act as a barrier between the surface and underlying aquifer. Given the inclusion of bioswales and porous/permeable pavement as part of the project's integrated management plan, no substantial reduction in groundwater recharge is expected. However, the incorporation of pervious pavement and other infiltration technologies also carries the potential to subject local groundwater resources to urban pollutants that may be present in runoff by creating a direct, more efficient conduit. Unmitigated, these pollutants could become concentrated in the shallow aquifer. With the implementation of the prescribed mitigation mentioned above, this impact would be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-3 Implement Mitigation Measure HYD-2b.

Level of Significance After Mitigation

Less than significant impact.

Alterations to Existing Drainage Patterns

Impact HYD-4: Development of the proposed project would not create the potential for downstream flooding or substantial erosion or siltation on- or offsite as a result of alteration of drainage patterns.

Impact Analysis

Development of the project site has the potential to alter the infiltration characteristics of the project site, increasing both the volume and discharge rate of stormwater runoff, which could contribute to downstream flooding or exceed the capacity of stormwater drainage systems. Site grading will also change the drainage pattern of the site. Potential locations where erosion may occur after construction include scouring at storm drain outlets.

The Preliminary Hydrology Report provided preliminary drainage calculations for pre- and post-development conditions, which are provided in Appendix F. The results are based on appropriately conservative assumptions in terms of flow routing, slope length, gutter flow velocity, and the application of a C-value of 0.40 for all undeveloped and existing pervious areas. Based on these factors, the proposed project's storage requirements are conservatively estimated with the drainage area north of Bollinger Canyon Road and east of Camino Ramon, requiring the most detention at approximately 1.56 acre-ft during a 100-year event (with 50 percent contingency). The remaining sub-watershed units required a maximum of 0.5 acre of detention storage with the drainage area south of Bollinger Canyon Road having a storage requirement of less than 0.2 acre.

Based on the calculated storage requirements, the Preliminary Hydrology Report proposes that the bioswale, green roof, and permeable pavement stormwater treatment techniques be engineered to detain stormwater for the period required to curb peak flows. The primary storage capacity would be provided within the bioswales, which would be constructed at a depth of approximately 3 to 4 feet below the surrounding grade to act as a temporary storage facility during design rainfall events. Likewise, the green roofs could be designed for greater storage capacity based on engineering and best design principles rather than the typical shallow depth of 4 inches.

Based on these features, the proposed stormwater treatment facilities, primarily the bioswales, would provide sufficient onsite storage capacity to detain a 100-year rainfall event rather than requiring underground detention or open basins. With these measures in place as part of the project, it is reasonable to conclude the minimal hydromodification would occur as a result of the project's implementation. This conclusion is supported by several factors including the pre-existence of an extensive stormwater collection system and the fact that the project outfalls into a portion of South San Ramon Creek, which is characterized as a concrete-lined trapezoidal channel. Hence, this section of the channel is armored and not susceptible to bank scour. In addition, since local regulations require that the project attenuates post-development peak flows to pre-development levels, it is reasonable to conclude that the project treatment facilities would also ensure negligible effects from flooding and bank scour at locations further downstream.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

Exceed Capacity of Downstream Drainage Conveyance Systems

Impact HYD-5: Development of the proposed project would create or contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems.

Impact Analysis

Runoff originating from the site drains to an existing 72- to 96-inch-diameter, cast-in-place concrete pipeline that is located along Camino Ramon. This pipeline eventually discharges beyond the project site to the South San Ramon Creek, which is a concrete-lined trapezoidal channel. The project would require the rerouting of the onsite portion of the pipeline to allow for the construction of the project. The proposed alignments are illustrated in Exhibit 4.7-2, and all would be 96 inches in diameter. For this reason, the project would not create a reduction in existing pipeline conveyance capacity. Further, the project will be required to detain runoff up to the 100-year design event. However, Preliminary Hydrology Report notes that special attention will be required during the final design of the pipe curvature, since the proposed pipeline alignments include curvatures of approximately 90 degrees to avoid proposed buildings. As a result, the implementation of prescribed mitigation would be required to ensure that the project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-5 Prior to issuance of site development permits for installation of the storm drain improvements, the project applicant shall submit plans and final hydraulic analysis to the City of San Ramon Engineering Department that depict the final design and specifications of the 96-inch drainage pipe. The plans shall demonstrate that the radius of the pipe, also referred to as beveled or mitered pipe, incorporates the deflection angle in the pipe joint and does not compromise the hydraulic capacity of the drainage system. A final hydrology and hydraulic report shall be submitted to the City to assess the capacity of the new drainage system within the planned development. The City shall review and approve the storm drain improvement plans prior to issuance of site development permits.

Level of Significance After Mitigation

Less than significant impact.

4.8 - Land Use

4.8.1 - Introduction

This section describes the existing setting regarding land use and planning and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on site reconnaissance by Michael Brandman Associates and review of the City of San Ramon General Plan and the San Ramon Zoning Ordinance.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on land use were less than significant after mitigation in Section 4.1 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all impacts related to land use were less than significant and did not require mitigation in Section 4.1 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project and new analysis is provided for potential impacts not previously considered in those documents.

4.8.2 - Environmental Setting

Land Use

Project Site

The approximately 44-acre site consists of four developed and undeveloped parcels located within the Bishop Ranch Business Park. Photographs of the parcels are shown in Exhibits 3-3a through 3-3e. Each parcel is described individually below.

Parcel 1A

Parcel 1A consists of 14.27 acres of undeveloped land and surface parking areas associated with Bishop Ranch 1. The northern portion of Parcel 1A contains approximately 7.56 acres of undeveloped, City-owned, rectangular-shaped property. This land consists of ruderal vegetation, with ornamental landscaping surrounding the property on all four sides. The southern 6.71-acre portion of Parcel 1A contains surface, landscaped parking areas associated with Bishop Ranch 1. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 East roadway.

Land Use

Parcel 1B

Parcel 1B consists of approximately 3.52 acres of surface, landscaped parking areas associated with Bishop Ranch 1. Ornamental landscaping surrounds the parcel on the west, north, and east sides. Sidewalks are present along its frontages with Bollinger Canyon Road and the Bishop Ranch 1 entrance road.

Parcel 2

Parcel 2 consists of the existing 14.57-acre Bishop Ranch 2 office complex. Bishop Ranch 2 contains 194,652 square feet of office space spread among several multi-story office structures. The office complex also contains surface parking areas and ornamental landscaping within the property and along its frontages with Sunset Drive, Bishop Drive, Camino Ramon, and Bollinger Canyon Road. Sidewalks are present along its entire frontage with Sunset Drive and a portion of its frontage with Bishop Drive.

Parcel 3A

Parcel 3A is an undeveloped 11.29-acre, City-owned parcel containing ruderal vegetation. A storage container surrounded by fencing is located in the eastern portion of the parcel. Ornamental landscaping is present along its frontage with Camino Ramon. Sidewalks are present along its frontages with Camino Ramon and Bollinger Canyon Road. The site is used for temporary parking and special events such as car shows and festivals.

Surrounding Area

A summary of surrounding uses for each parcel is provided in Table 4.8-1. Surrounding land uses referenced in the table are discussed in greater detail below.

Table 4.8-1: Surrounding Land Use Summary

Parcel No.	Surrounding Land Uses			
	West	North	East	South
1A	Bishop Ranch 1 office structure and Bishop Ranch 1 entrance road; Parcel 1B	Bollinger Canyon Road; Parcel 3A	Iron Horse Trail; Market Place commercial uses (i.e., Marriot Residence Inn and Orchard Supply Hardware); Reflections Condominiums	Bishop Ranch 1 East roadway; Bishop Ranch 1 surface parking area; Residential uses
1B	Chevron Park	Bollinger Canyon Road; Parcel 2	Bishop Ranch 1 entrance road; Parcel 1A	Bishop Ranch 1 office structure; Bishop Ranch 1 surface parking areas
2	Sunset Drive; Shops at Bishop Ranch	Bishop Drive; AT&T campus	Camino Ramon; Parcel 3A	Bollinger Canyon Road; Chevron Park; Parcel 1B

Table 4.8-1 (Cont.): Surrounding Land Use Summary

Parcel No.	Surrounding Land Uses			
	West	North	East	South
3A	Camino Ramon	Bishop Ranch 3 parking structure; Bishop Ranch 3 office structure	Iron Horse Trail; Watson Canyon Drainage; Central Park	Bollinger Canyon Road; Parcel 1A; Bishop Ranch 1 office structure
Source: Michael Brandman Associates, 2007.				

Bishop Ranch 1

Bishop Ranch 1 is a three-building complex totaling 747,135 square feet of office space that opened in 2004. The buildings are characterized as five-story structures with white façades and prominent glass windows, similar in appearance to Bishop Ranch 3. Surface parking areas with a total of 2,787 spaces are located on all four sides of Bishop Ranch 1. A perimeter roadway connects the west side of Bishop Ranch 1 with the southern and eastern parking lots and Bollinger Canyon Road.

Iron Horse Trail

The Iron Horse Trail is a Class I, 24.47-mile trail stretching from Pleasanton to Concord along the former Southern Pacific Railroad San Ramon Branch Line right-of-way. Within the project vicinity, the concrete and asphalt trail forms the eastern boundary of the Bishop Ranch Business Park. The trail crosses Bollinger Canyon Road at grade. Landscaping and benches are located on the north and south sides of Bollinger Canyon Road. Pathways link the trail to surrounding land uses, including Central Park, Bishop Ranch 1, and Bishop Ranch 3.

Market Place

The Market Place is an approximately 182,500-square-foot commercial center containing a Nob Hill Supermarket, a Marriot Residence Inn hotel, an Orchard Supply Hardware, a Long’s Drugs, a Valero gas station, the San Ramon Library, several bars and restaurants, and a variety of retail and service-oriented businesses.

Reflections Condominiums

The Reflections Condominiums are located south of the Market Place, adjacent to the Iron Horse Trail. This development consists of multiple two-story residential structures. The development is separated from the Iron Horse Trail by a 6-foot-high wood fence.

Single Family Residential Uses

A detached single-family residential neighborhood is located south of Bishop Ranch 1. This neighborhood consists of mostly two-story residences. A 6-foot-high wood fence marks the property line between the residences and Bishop Ranch 1.

Chevron Park

Chevron Park is the 92-acre corporate headquarters of Chevron Corporation, a multi-national integrated energy producer. Chevron Park opened in 1984 and is characterized as a modern corporate campus. Buildings within Chevron Park are clustered in the center of the campus, and surface parking areas are located around the perimeter. A 125-foot communications tower is located in the center of the campus. Public access to the campus is restricted.

The Shops at Bishop Ranch

The Shops at Bishop Ranch is an approximately 96,000-square-foot, modern commercial retail development located west of Bishop Ranch 2, south of Bishop Drive, north of Bollinger Canyon Road, and east of Interstate 680 (I-680). The retail center is owned by Keenan Land Company and features tenants such as Whole Foods, and Borders, sit-down restaurants, quick-serve restaurants, banking, health and beauty, and services. The Shops at Bishop Ranch opened in 2001. An approximately 126,000 square-foot Target Greatland store is located west of the Shops at Bishop Ranch and opened in 1994. AT&T Campus.

The AT&T Campus is the 100-acre western regional operations center for AT&T Inc., a multi-national telecommunications provider. A large, offset-cross-shaped office building with a prominent 125-foot-high white arch is located in the center of the campus with surface parking located around the perimeter. A small lake occupies the southwestern corner of the campus. Mature ornamental landscaping and a paved and unpaved path is located around the perimeter of the campus. The AT&T campus opened in 1985 and was originally tenanted by Pacific Bell. SBC Communications, Inc. acquired Pacific Bell's corporate parent in 1997. In 2005, SBC Communications, Inc. acquired AT&T Corporation and subsequently renamed itself AT&T, Inc.

Bishop Ranch 3

Bishop Ranch 3 is a four-building complex totaling 934,696 square feet of office space that opened in 2004. The buildings are characterized as five-story structures with white façades and prominent glass windows, similar in appearance to Bishop Ranch 1. Two multi-level parking garages are part of Bishop Ranch 3, including one adjacent to Parcel 3A.

Central Park

Central Park is the largest active park in the City of San Ramon. The park encompasses 35 acres and contains two soccer pitches, four multi-use athletic fields (e.g., soccer, cricket, baseball, and softball), a baseball field, volleyball courts, basketball courts, tennis courts, a skate park, a children's playground, and picnic areas. Central Park includes the 23,000-square-foot San Ramon Community Center, which contains multi-purpose rooms, meeting venues, and offices. The Watson Canyon Drainage channel, a man-made drainage feature, delineates the western boundary of the park from the Iron Horse Trail right-of-way.

Land Use Designations

Project Site

The General Plan and Zoning Ordinance designations for the four parcels comprising the project site are provided in Table 4.8-2 and shown in Exhibits 4.8-1 and 4.8-2. The developed uses on Parcels 1A, 1B, and 2 are consistent with the General Plan and Zoning Ordinance designations. Because it is undeveloped, the existing use of Parcel 3A is also consistent with the General Plan and Zoning Ordinance. Parcel 1B was re-designated Mixed Use and City Center Mixed Use (CCMU) in 2006 in anticipation of the proposed project.

Table 4.8-2: Project Site Land Use Designation Summary

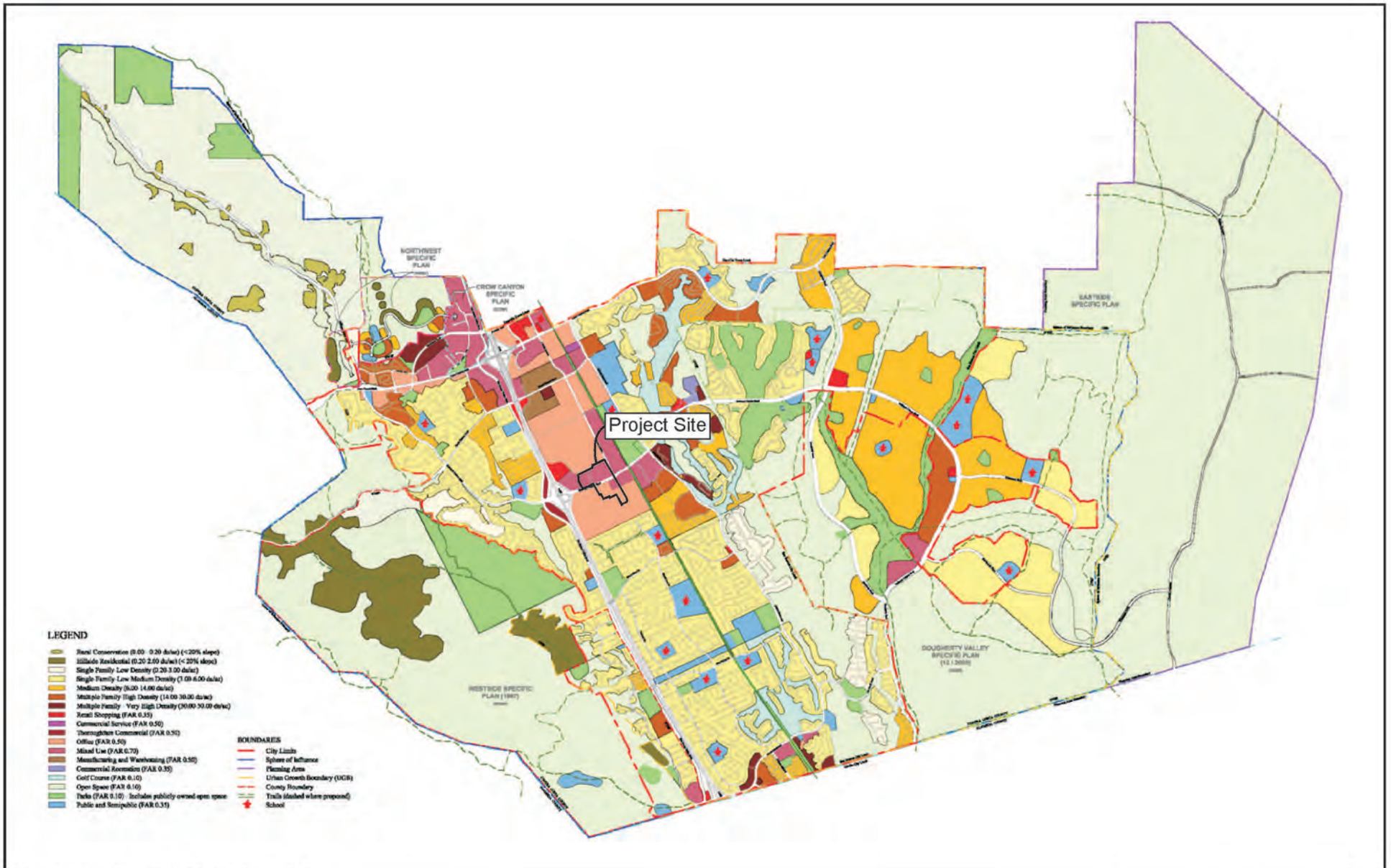
Parcel No.		General Plan Designation	Zoning Ordinance Designation
1A	7.56 acres*	Mixed Use	City Center Mixed Use (CCMU)
	6.71 acres**	Office	Administrative Office, Height Overlay (OA-H)
1B		Mixed Use	City Center Mixed Use (CCMU)
2		Mixed Use	City Center Mixed Use (CCMU)
3A		Mixed Use	City Center Mixed Use (CCMU)
* = City-owned portion ** = Sunset Development-owned portion Source: Michael Brandman Associates, 2007.			

Surrounding Land Uses

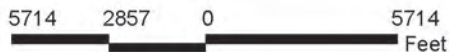
The General Plan and Zoning Ordinance designations for the surrounding land uses around the project site are provided in Table 4.8-3. The existing uses of these properties are consistent with the General Pan and Zoning Ordinance designations.

Table 4.8-3: Surrounding Land Use Designation Summary

Land Use	General Plan Designation	Zoning Ordinance Designation
Bishop Ranch 1	Office	Administrative Office, Height Overlay (OA-H)
Iron Horse Trail	Parks	Parks (P)
Market Place	Mixed Use	Mixed Use (MU)
Reflections Condominiums	Multiple Family - High Density	Medium-High Density Residential (RMH)
Single Family Residential Uses	Single Family - Low-Medium Density	Single-Family Residential (RS-10)
Chevron Park	Office	Administrative Office, Height Overlay (OA-H)
Shops at Bishop Ranch	Mixed Use	Mixed Use (MU)



Source: Michael Brandman Associates, 2007.

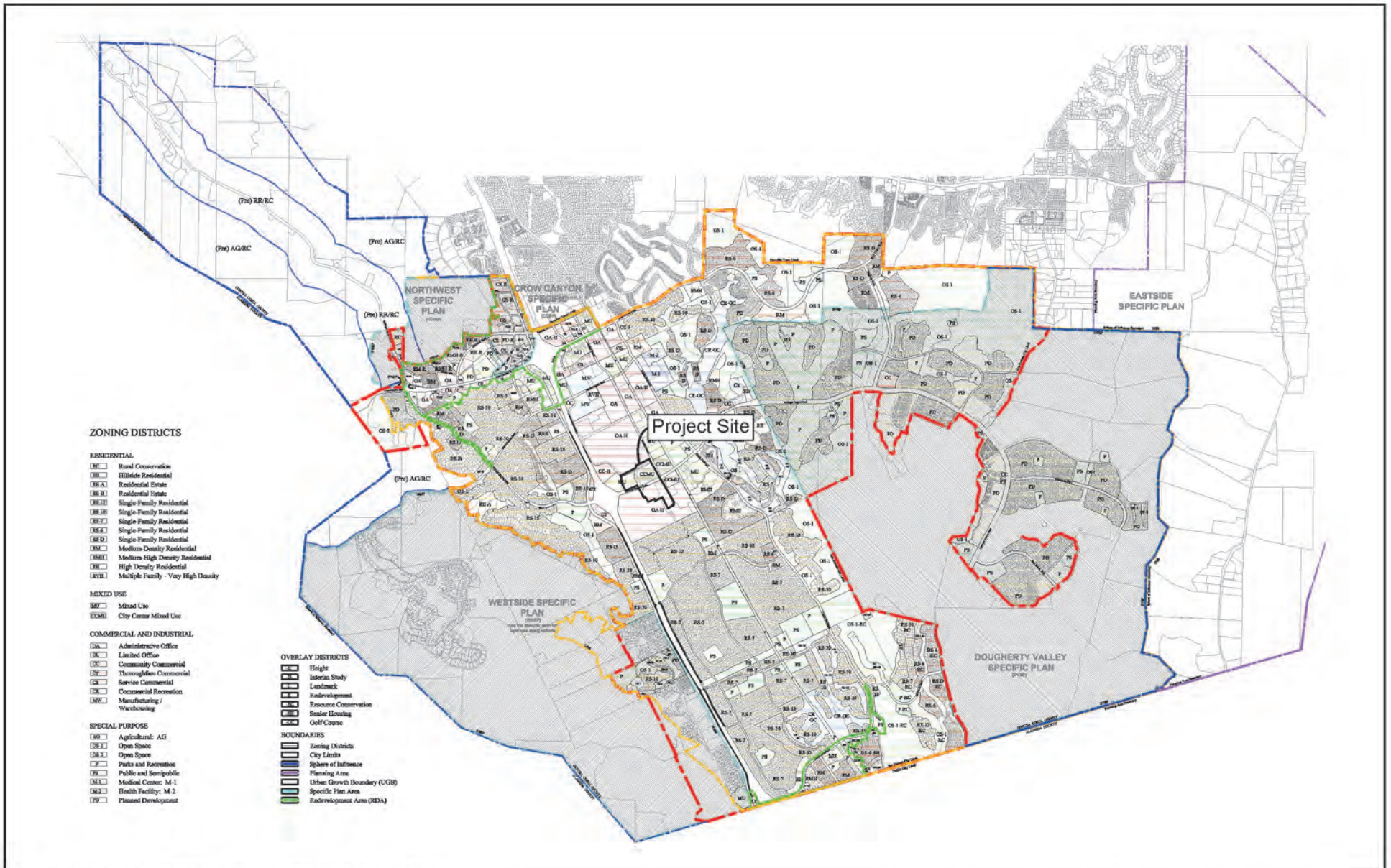


Michael Brandman Associates

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Exhibit 4.8-1 General Plan Designations

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



Source: City of San Ramon Planning Department, August 2006.



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Michael Brandman Associates

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Exhibit 4.8-2 Zoning Ordinance Designations

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Table 4.8-3 (Cont.): Surrounding Land Use Designation Summary

Land Use	General Plan Designation	Zoning Ordinance Designation
AT&T Campus	Office	Administrative Office, Height Overlay (OA-H)
Bishop Ranch 3	Mixed Use	Mixed Use (MU)
Central Park	Parks	Parks (P)
Source: Michael Brandman Associates, 2007.		

4.8.3 - Regulatory Framework

Local

City of San Ramon General Plan

The City of San Ramon General Plan was approved by the voters on March 5, 2002. The General Plan serves as a blueprint for development and land use activities within the City limits. The City of San Ramon General Plan contains the following elements:

- Economic Development
- Growth Management
- Land Use
- Traffic and Circulation
- Parks and Recreation
- Public Facilities and Utilities
- Open Space and Conservation
- Safety
- Noise
- Housing

Each General Plan element contains goals and policies to guide existing and future land use and development activities.

San Ramon City Code

The San Ramon City Code sets forth regulations to ensure that development and land use activities protect and promote the health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City. The San Ramon Municipal Code consists of all ordinances adopted by the San Ramon City Council. The Plan is divided into four titles, including General and Administration; Regulations; Construction, Development and Land Use; and Zoning. The Zoning Ordinance was updated in 2006 to reflect changes made during the General Plan update.

San Ramon Zoning Ordinance

The project site parcels are zoned Administrative Office with a height overlay (OA-H) and City Center Mixed Use (CCMU). The provisions of each zoning designation are discussed below:

Administrative Office, Height Overlay (OA-H)

The Administrative Office (OA) zone is applied to areas of the City appropriate for major office buildings, support facilities, and compatible commercial uses within landscaped environments that are protected from the more intense levels of activity associated with retail commercial development. The Administrative Office (OA) zoning provisions limit building height to 55 feet above finished grade, and the height overlay (-H) increases the allowable height to 75 feet above finished grade, provided that building architecture incorporates a varying roof plane to add variation to the structure’s appearance. The Administrative Office (OA) designation allows a Floor Area Ratio (FAR) of 0.45 for commercial buildings.

The following are allowable uses in the Administrative Office (OA) zoning district. Uses that require a Use Permit or a Minor Use Permit are noted with an asterisk (*):

- Bank, financial services*
- Business support service
- Child day care center*
- Conference/convention facility*
- Eating and drinking establishments (with wine and beer, with full alcoholic beverage service*, outdoor seating*)
- General retail
- Meeting facility, public or private*
- Office (accessory, business/service, government, processing*, professional/administrative)
- Parking facility, public or commercial*
- Personal services*
- Public safety facility
- Research and development
- Transit station*

City Center Mixed Use (CCMU)

The City Center Mixed Use (CCMU) zone applies to all or portions of the four parcels that comprise the project site: the City-owned portion of Parcel 1A, Parcel 1B, Parcel 2, and Parcel 3A. The Zoning Ordinance states that development in the City Center Mixed Use (CCMU) zone should reflect high-quality design, with integrated open space and recreational or cultural amenities, as well as opportunities for workforce housing. The City Center Mixed Use (CCMU) zoning provisions do not have any height limits. The City Center Mixed Use (CCMU) provisions allow a 0.70 FAR, which can be increased to 1.35 FAR if affordable housing and significant public benefits or amenities such as public art and plazas, public facilities, or a transit facility is nearby.

The following are allowable uses in the City Center Mixed Use (CCMU) zoning district. Uses that require a Use Permit or a Minor Use Permit are noted with an asterisk (*):

- Accessory retail and services
- Bank, financial services
- Business support service
- Child day care center*
- Commercial recreation facility*
- Eating and drinking establishments (With wine and beer, take-out service*, full alcoholic beverage service*, live entertainment*, outdoor seating*)

- Farmer's market - Ongoing*
- Library, museum, art gallery (non-retail gallery)
- Medical services - Doctor office
- Parking facility, public or commercial*
- Specialty food store
- Theater, movies or performing arts*
- Fitness/health facility*
- Live/work unit*
- Office (accessory, business/service, government, processing*, Professional/administrative)
- Personal services*
- Sports and entertainment assembly facility*
- Transit station
- General retail
- Mixed use project residential component
- Outdoor retail sales and activities*
- Pharmacy, medical supplies
- Studio - Art, dance, martial arts, music, etc.*

4.8.4 - Methodology

Michael Brandman Associates (MBA) evaluated the potential for land use impacts through site reconnaissance and review of applicable land use policy documents. MBA personnel performed site reconnaissance on multiple occasions of the four parcels that constitute the project site and surrounding land uses. Photographs were taken of all four parcels and surrounding land uses to document existing conditions. MBA reviewed the City of San Ramon General Plan, the San Ramon City Code, which includes the Zoning Ordinance, and identified applicable policies and provisions that pertain to the proposed project.

4.8.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Physically divide an established community?
- b.) 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?
- c.) Conflict with any applicable habitat conservation plan or natural communities conservation plan? (Refer to Section 7, Effects Found Not To Be Significant.)

4.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Division of an Established Community

Impact LU-1: The proposed project would not physically divide an established community or create conflicts with neighboring land uses.

Impact Analysis

The proposed project would develop and redevelop a total of approximately 2.1 million square feet of mixed uses (approximately 1.6 million net square feet above existing vested entitlement and approximately 1.9 million square feet of net additional construction above existing site conditions) on 44 acres in an existing urbanized portion of San Ramon. The potential for division of an established community is evaluated by project component.

Plaza District

The Plaza District would be developed on Parcels 2 and 3A. Parcel 3A is currently undeveloped land and does not contain any structures. Parcel 2 contains the existing Bishop Ranch 2 office complex, which would be demolished to allow for development of the Plaza District. Because it does not contain residential or community-oriented uses (e.g., a public place of congregation), the demolition of Bishop Ranch 2 would not be considered the division of an established community.

Bishop Ranch 1A

Bishop Ranch 1A would be developed on Parcel 1A, which contains undeveloped land and a surface parking area associated with Bishop Ranch 1. No established communities exist on this parcel.

City Hall and Transit Center

The City Hall and Transit Center would be developed on Parcel 1B, which contains a surface parking area associated with Bishop Ranch 1. No established communities exist on this parcel.

Surrounding Land Uses

The project site is surrounded by office space, commercial, and residential uses. Bishop Ranch 1 and Bishop Ranch 3 offices and Chevron Park would be adjacent to the proposed project to the south, north, and west, respectively. The Shops at Bishop Ranch and the Market Place shops would be adjacent to the proposed project to the west and east, respectively. The Reflections Condominiums and the single-family residential development would be adjacent to the proposed project to the east and the south, respectively. With the exception of Bishop Ranch 1 and Chevron Park and Bishop Ranch 1, the proposed project structures would be separated from surrounding land uses by roadways. Chevron Park would be separated from the City Hall and Transit Center by an existing fence line. Bishop Ranch 1A, City Hall, and the Transit Center would become integrated with Bishop Ranch 1 and would share roadways and parking facilities with the existing office complex. The development of Bishop Ranch 1A, City Hall, and the Transit Center close to Bishop Ranch 1 would not create any land use conflicts because the new structures would either contain similar uses (e.g., Bishop Ranch 1A and City Hall), or provide necessary transportation facilities and services (e.g., the parking structures and the Transit Center).

In summary, the development of the proposed project would not create land use conflicts with neighboring land uses because of the location of the project site and nature of the proposed project. Therefore, land conflicts would not occur, and impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

General Plan Consistency

Impact LU-2: **The proposed project would be consistent with the City of San Ramon General Plan.**

Impact Analysis

The parcels comprising the project site are designated for Mixed Use and Office uses by the City of San Ramon General Plan. Below is a discussion of each project component's consistency with these General Plan land use designations.

Plaza District

Parcels 2 and 3A are designated Mixed Use by the General Plan. The Plaza District is a mixed-use development and would be consistent with the allowed uses of the Mixed Use designation.

Bishop Ranch 1A

The City-owned portion of Parcel 1A is designated Mixed Use and the Sunset Development-owned portion is designated Office. The Bishop Ranch 1A office structures would be developed on the City-owned portion of Parcel 1A and is an allowed use within the Mixed Use designation. Moreover, because of its relationship to the Plaza District, Bishop Ranch 1A is consistent with the principles of mixed-use development. The Bishop Ranch 1 and the Bishop Ranch 1A parking structures would be developed on the Sunset Development-owned portion of Parcel 1A. Parking structures are an allowed use within the Office designation.

City Hall and Transit Center

Parcel 1B is designated Mixed Use by the General Plan. The City Hall and the Transit Center would be public facilities, which is an allowable use within the Mixed Use land use designation. City Hall would also contain the City's administrative offices, which is consistent with the allowable uses of the Mixed Use designation.

Policy Consistency

The proposed project’s consistency with the applicable goals and policies of the City of San Ramon General Plan is provided in Table 4.8-4. Note that goals and policies of the General Plan that were not applicable to the proposed project were excluded from the analysis in the table.

Table 4.8-4: General Plan Consistency Analysis

Goal/ Policy No.	Applicable Policy	Consistency Determination
Economic Development		
2.4-G-1	Foster a climate in which business can prosper.	<u>Consistent</u> : The proposed project would provide a net increase of approximately 1.6 million square feet of mixed-uses above existing vested entitlements, including commercial, residential, and civic and would be expected to enhance local commerce as a destination for residents and visitors.
2.4-I-5	Encourage, consistent with the Housing Element, housing for San Ramon’s resident workforce to improve the match between local employment and local workers.	<u>Consistent</u> : The proposed project would provide up to 487 high-density residential units ranging in size from 750 to 2,000 square feet in a mixed-use setting adjacent to the Bishop Ranch Business Park. This type of housing opportunity is consistent with the Housing Element.
2.4-I-8	Consider adjustments to development controls that allow for more efficient use of sites already developed for employment uses (e.g., through height and/or FAR increases in combination with structured parking).	<u>Consistent</u> : According to Policies 4.8-I-16 and 4.8-I-17, the City Center project is excluded from height restrictions (four or five stories) placed on other development within the City. This will allow more square footage to be developed on the four parcels constituting the project site and, therefore, provide more efficient use of land.
2.4-I-10	Promote, consistent with the Traffic and Circulation Element, mass transportation opportunities into the Bishop Ranch and Crow Canyon/San Ramon Valley Boulevard business areas.	<u>Consistent</u> : The proposed project would include a new Transit Center adjacent to City Hall. The Transit Center would enhance existing transit service in Bishop Ranch 1, as well as be within close walking distance to Chevron Park and the Shops at Bishop Ranch.
2.4-I-11	Encourage non-motorized means of transportation to business areas.	<u>Consistent</u> : The proposed project would promote the use of pedestrian and bicycle modes of transportation by centering the Plaza District around a large pedestrian plaza, located in front of the hotel. The plaza would be used for seasonal programs, such as farmer’s markets during the warmer months and outdoor ice-skating during the winter months. The proposed project’s location adjacent to the Iron Horse Trail would also encourage non-motorized modes of transportation.

Goal/ Policy No.	Applicable Policy	Consistency Determination
2.4-I-12	Encourage retail development in mixed-use areas to create and accommodate local demand.	<u>Consistent:</u> The proposed project includes 635,042 square feet of retail consisting of two anchor stores, a six-screen arts cinema, and smaller inline retail uses.
2.4-I-13	Develop the City Center area into a cultural, recreational, and compatible retail center to ensure consistency with the recommendations of the City Center Task Force.	<u>Consistent:</u> The proposed project includes two larger anchor stores along with smaller in-line shops and restaurants, an arts cinema, and a pedestrian plaza to accommodate community and cultural events, as well as a farmer's market and outdoor seasonal ice skating rink. The proposed project's proximity to both the Iron Horse Trail and Central Park would expand recreational opportunities in the area.
2.4-I-14	Use development controls to minimize adverse visual effects of the transportation components of development.	<u>Consistent:</u> Street trees would be located along roadways in the Plaza District. The internal streets in the Plaza District would feature decorative paving or brickwork to denote pedestrian crossings and intersections. Roadway medians and frontages would be landscaped in and around Bishop Ranch 1A and City Hall, similar to the current landscaping provided along the Bishop Ranch 1 entrance roadway.
2.4-G-3	Ensure the fiscal and financial health of the City.	<u>Consistent:</u> The proposed project would provide a net increase of approximately 1.6 million square feet of mixed-uses above existing vested entitlements, including office, commercial, residential, and civic uses, and all would contribute to improved fiscal and financial health for the City. The Urban Decay analysis prepared for the proposed project by Economic & Planning Systems projects that the retail square footage will generate an estimated \$238 million in sales in 2010, a portion of which would be returned to the City in the form of sales tax. The proposed project's hotel would generate hotel occupancy tax revenue for the City. The Plaza District and Bishop Ranch 1A would also provide property tax revenue to the City. Finally, the proposed project would indirectly increase local tax revenue by creating an estimated 3,636 new employment opportunities.

Goal/ Policy No.	Applicable Policy	Consistency Determination
2.4-I-16	Evaluate the ability of new development to pay for its infrastructure, its share of public and community facilities, and the incremental operating costs it imposes.	<u>Consistent</u> : The proposed project would provide either the full cost or a pro-rata share for its necessary roadway improvements. The project would also provide development fees to public service and utility providers for capital improvements. The proposed project’s commercial and hotel uses would generate substantial amounts of tax revenue for the City that could be used to fund the operation of various City services.
2.4-I-17	Existing City development review practices assure that new development provides for the capital facilities needed to serve it. Ongoing maintenance of those facilities—generally via infrastructure landscaping and lighting districts—is also typically provided for. While the defraying of such costs by new development would normally be expected, some projects may contribute to the community in ways that compensate for a negative fiscal impact.	<u>Consistent</u> : Sunset Development and the City have a formal lighting maintenance agreement for the Bishop Ranch Business Park, and it would be expected that the proposed project would be covered by this agreement. Therefore, lighting maintenance costs associated with the proposed project would not pose a burden on City resources.
2.4-I-19	Encourage diverse economic growth within the City, particularly in the retail sector.	<u>Consistent</u> : The proposed project’s Plaza District component would provide 635,042 square feet of retail, spread among larger anchor stores, inline shops and restaurants, and a six-screen arts cinema. The Plaza District would be a “lifestyle center,” which is a type of commercial retail development that currently does not exist in San Ramon. In addition, the Plaza District would include a pedestrian plaza that would be used for seasonal outdoor retail activities such as a farmer’s market in the warmer months and holiday festivities in the winter months (e.g., ice skating).
Growth Management		
3.1-G-1	Manage the City’s growth in a way that balances existing and planned transportation facilities, protection of open space and ridgelines, provision of diverse housing options and job opportunities, and the preservation of high-quality community facilities and services.	<u>Consistent</u> : The proposed project contains variety of uses, including mixed-uses (residential, retail, hotel, office) in the Plaza District, Class A office space in Bishop Ranch 1A, and civic uses in City Hall. The Plaza District would provide high-density residential units in a mixed-use setting, as well as

Goal/ Policy No.	Applicable Policy	Consistency Determination
<i>cont.</i>		inclusionary workforce housing units. The project would create an estimated 3,336 jobs, ranging from part-time, entry-level to highly skilled, career opportunities. The City Hall would include a new library and police station, and would improve the delivery of library services and police protection to the community. The proposed project would also include a Transit Center that would provide four bus stalls and a waiting area for passengers. Finally, the proposed project is adjacent to the Iron Horse Trail and would be accessible for trail users. In summary, the proposed project provides balanced land uses, diverse housing options, job opportunities, multiple transportation options, and high-quality community facilities.
3.1-I-1	Allow urban development only if traffic from that development can be accommodated within acceptable traffic levels of service.	<u>Consistent:</u> The proposed project would implement roadway improvements to ensure that acceptable traffic level of service meets Measure C performance standards. Refer to Section 4.12, Transportation for further discussion.
3.1-I-3	Provide a variety of diverse housing options to accommodate the local employment base, including public service employees.	<u>Consistent:</u> The proposed project would provide up to 487 high-density residential units ranging in size from 750 to 2,000 square feet in a mixed-use setting adjacent to the Bishop Ranch Business Park in order to provide diverse housing options.
3.1-I-7	Allow urban development only within the City's Urban Growth Boundary (see Implementing Policy 4.6-I-1) and only in accord with a plan for full urban services (police, fire, parks, water, sewer, streets and storm drainage) to which all providers are committed.	<u>Consistent:</u> The proposed project is located within the City's Urban Growth Boundary. Portions of the project site have existing connections to potable water, fire water, wastewater, storm drainage, electricity, natural gas, and street lighting systems.
3.2-G-1	Ensure the attainment of public facility and service standards through the City's development review process, Capital Improvement Program, and a variety of funding mechanisms to maintain existing facilities and help fund expansion.	<u>Consistent:</u> The project applicant would provide development fees to City and the San Ramon Valley Unified School District for capital improvements to public facilities. Refer to Section 4.11, Public Services and Recreation and Section 4.14, Utility and Service Systems for further discussion.
3.2-I-3	Require new development to fund public facilities and infrastructure that is deemed necessary to mitigate the impact of that new development.	<u>Consistent:</u> The project applicant would provide development fees to City and the San Ramon Valley Unified School District for capital improvements to public facilities and infrastructure. Refer to Section 4.11, Public Services and Recreation and Section 4.14, Utility and Service Systems for further discussion.

Goal/ Policy No.	Applicable Policy	Consistency Determination
3.2-I-4	Levy mitigation fees for public facilities and infrastructure improvements in proportion to a new development's impact.	<u>Consistent:</u> The project applicant would provide development fees to City and the San Ramon Valley Unified School District to cover the proposed project's impacts on public facilities and infrastructure. Refer to Section 4.11, Public Services and Recreation and Section 4.14, Utility and Service Systems for further discussion.
3.3-G-1	Maintain acceptable traffic level of service (equal to or better than Measure C requirements) on City streets and roadways through implementation of Transportation Demand Management (TDM), Growth Management, the Capital Improvement Program and traffic engineering operational measures.	<u>Consistent:</u> The proposed project would implement roadway improvements to ensure that acceptable traffic level of service meets Measure C performance standards. Refer to Section 4.12, Transportation for further discussion.
3.3-I-1	Strive to maintain traffic level of service (LOS) C or better as the standard at all intersections on streets subject to Measure C, with LOS D during no more than 3 hours of the day (a.m., p.m., and noon peaks).	<u>Consistent:</u> After the implementation of improvements to mitigate for the proposed project's impacts on intersection operations, all impacted intersections would operate at the LOS identified by Measure C or better. Refer to Section 4.12, Transportation for further discussion.
3.3-I-2	Accept LOS D during two-hour peak periods (a.m. and p.m.) with the possibility of intersections at or closely approximating the limits of LOS D (Volume/Capacity < 0.90), only on arterial routes bordered by non-residential development where improvements to meet the City's standard would be prohibitively costly or disruptive.	<u>Consistent:</u> After the implementation of improvements to mitigate for the proposed project's impacts on intersection operations, all impacted intersections would operate either LOS D or better and would be consistent with Measure C performance standards. Refer to Section 4.12, Transportation for further discussion.
3.3-I-3	Require traffic impact studies for all proposed new development projected to generate 50 or more peak-hour vehicle trips.	<u>Consistent:</u> A traffic impact study was prepared by DMJM Harris for the proposed project. Refer to Section 4.12, Transportation for further discussion.
3.3-I-4	Proposed development expected to generate 50 or more peak-hour vehicle trips will not be approved, unless it can be shown that its impact can be mitigated and the City's traffic and circulation standards can be maintained. As required by Measure C, the City also will not approve	<u>Consistent:</u> The proposed project would generate more than 100 AM and PM peak-hour trips and would be subject to the "Findings of Consistency" requirement. After the implementation of improvements to mitigate for the proposed project's impacts on intersection operations, all impacted intersections would

Goal/ Policy No.	Applicable Policy	Consistency Determination
<i>cont.</i>	any proposed development expected to generate over 100 peak-hour vehicle trips, unless “Findings of Consistency” can be made. Such Findings will be based on the project’s ability to maintain Measure C traffic and circulation standards, in conjunction with anticipated City-initiated capital improvements. Identify and implement circulation improvements on the basis of detailed traffic studies.	operate at LOS D or better and would be consistent with Measure C performance standards. Refer to Section 4.12, Transportation for further discussion.
3.3-I-5	Support regional and local neighborhood transit options to reduce the use of the automobile and maintain acceptable traffic levels of service.	<u>Consistent</u> : The proposed project would include a Transit Center adjacent to City Hall. The Transit Center would provide four bus stalls and a waiting area for passengers. In addition, the proposed project would be accessible from the Iron Horse Trail and would provide pedestrian connections to surrounding land uses, including the Shops at Bishop Ranch, Bishop Ranch 1, Bishop Ranch 3, Central Park, and The Market Place.
3.4-G-1	Utilize Transportation Systems Management (TSM) to reduce total vehicle trips on San Ramon streets, and to contribute to regional air quality improvement and effective growth management.	<u>Consistent</u> : The proposed project would promote trip reduction through the inclusion of a Transit Center, pedestrian and bicycle connections to the Iron Horse Trail and surrounding land uses, and locating mixed uses in an existing urbanized area within walking or biking distance of office complexes and commercial retail centers. These project features provide alternatives to single-passenger vehicle usage and is consistent with the objective of contributing to regional air quality improvement and effective growth management.
3.4-I-3	Cooperate with service providers and other jurisdictions to promote local and regional public transit service.	<u>Consistent</u> : The proposed project’s Transit Center would be served by County Connection bus service, which connects to regional transportation systems such as BART.
3.4-I-4	Support local feeder transit service to and from current and future regional transit lines.	<u>Consistent</u> : The proposed project would include a Transit Center that would be incorporated into the ground floor of the two-level, 414-space parking garage located on the south side of the City Hall. The Transit Center would provide four bus stalls and a waiting area for passengers and would support current and future regional transit lines.

Goal/ Policy No.	Applicable Policy	Consistency Determination
3.4-I-7	Improve and expand the bicycle routing system in San Ramon.	<u>Consistent</u> : The existing Class II bicycle facilities on Bishop Drive that terminate at Sunset Drive would be extended to Camino Ramon and then to Bollinger Canyon Road as part of the roadway improvements associated with the proposed project. The extended Class II bicycle facilities would connect with the Class I Iron Horse Trail facility, enhancing bicycle mobility in the project area.
3.5-G-1	Participate in cooperative and multi-jurisdictional transportation planning for the maintenance of regional mobility and air quality standards as required by the Measure C Growth Management Program and the Contra Costa Congestion Management Plan (CMP).	<u>Consistent</u> : The proposed project's Transit Center is intended to provide a centralized and convenient location for local bus service that would serve neighboring communities, as well as the Dublin/Pleasanton and Walnut Creek BART stations. In addition, the proposed project would promote the use of pedestrian and bicycle modes of transportation through its proximity to the Iron Horse Trail and nearby office complexes and commercial centers. This is consistent with regional mobility and air quality improvement programs.
3.5-I-4	Participate in programs to mitigate regional traffic congestion, including regional traffic impact fees on new development.	<u>Consistent</u> : The proposed project would implement roadway improvements to ensure that acceptable traffic level of service meets Measure C performance standards. Refer to Section 4.12, Transportation for further discussion.
3.5-I-5	Emphasize regional transportation demand management and trip reduction strategies as alternatives to increased roadway capacity.	<u>Consistent</u> : The proposed project would employ trip reduction strategies through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. It would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction through its adjacency to the Iron Horse Trail, and its siting of residential and office uses near shopping, dining, and entertainment. These reductions would reduce the need for increased roadway capacity.
3.5-I-6	Continue to address the impacts of land use decisions on regional and local transportation facilities.	<u>Consistent</u> : The proposed project would implement roadway improvements to ensure that acceptable intersection and arterial roadway level of service meets adopted performance standards. Refer to Section 4.12, Transportation for further discussion.

Goal/ Policy No.	Applicable Policy	Consistency Determination
3.6-G-1	Promote the opportunity to both work and live in San Ramon.	<u>Consistent:</u> The proposed project would provide more than 2.1 million square feet of mixed-uses, including office, commercial, residential, and civic uses to promote the opportunity to both work and live in San Ramon. The Plaza District would contain 487 dwelling units and its retail, hotel, and flex office/retail components would provide employment opportunities.
3.6-I-1	Develop and implement housing programs that emphasize the availability of housing for people who work in local jobs.	<u>Consistent:</u> The proposed project would provide 487 high-density residential units ranging in size from 750 to 2,000 square feet in a mixed-use setting adjacent to the Bishop Ranch Business Park in order to implement housing programs promoting the availability of housing for local workers.
Land Use		
4.6-I-10	Require residential development that employs creative site design and architectural quality that blends with the characteristics of each location and its surroundings, and incorporate a 360° design element.	<u>Consistent:</u> The architectural design of the residential structures in the Plaza District would incorporate contemporary design elements that balance scale, adjacency, and use mix to create a visually appealing destination. The Plaza District design emphasizes clean building exteriors and the use of glass and water.
4.6-I-11	Provide a wide range of housing opportunities for current and future residents.	<u>Consistent:</u> The proposed project would provide 487 high-density residential units ranging in size from 750 to 2,000 square feet in a mixed-use setting adjacent to the Bishop Ranch Business Park in order provide a wide range of housing opportunities to fill current and projected needs.
4.6-I-13	Provide high-quality public facilities, services, and other amenities close to residents.	<u>Consistent:</u> The proposed project would provide a net increase of 1.6 million square feet of mixed-uses above existing vested entitlements, including office, commercial, residential, and civic uses to provide public facilities near residential areas.
4.6-I-14	Ensure that all residential development provides adequate on-site parking.	<u>Consistent:</u> The proposed project includes 896 parking spaces reserved for the anticipated 487 residential units. These spaces are provided in five off-street parking garages within the Plaza District.
4.6-I-17	Maintain neighborhood and community shopping centers of sizes and at locations that offer both choice and convenience for shoppers and residents while sustaining a strong retail base for the City.	<u>Consistent:</u> The proposed project adds 635,042 square feet of retail to the area's existing shopping areas to offer choice and convenience to residents living in the Plaza District and in existing residential areas. The larger anchor stores and smaller shops will promote a strong retail base for the City.

Goal/ Policy No.	Applicable Policy	Consistency Determination
4.6-I-18	Ensure that neighborhood retail centers and commercial service buildings are compatible with the surrounding neighborhood and incorporate a 360° design element.	<u>Consistent:</u> The architectural design of all of the structures in the Plaza District would incorporate contemporary design elements that balance scale, adjacency, and use mix to create a visually appealing destination. The Plaza District design emphasizes clean building exteriors and the use of glass and water. Building design incorporates views from all directions.
4.6-I-20	Allow office uses that are associated with complementary commercial service businesses in commercial service areas.	<u>Consistent:</u> The Bishop Ranch 1A Office Complex would attract businesses that will value the commercial services offered in the new Plaza District, as well as in the existing Shops at Bishop Ranch and in the San Ramon Market Place.
4.6-I-22	Establish design standards for mixed use development that will result in a high-quality pedestrian-scaled environment, with one-to-four story buildings, side or rear parking areas, streetfront windows and entries, and public and private open space.	<u>Consistent:</u> The architectural design of all of the structures in the Plaza District would incorporate contemporary design elements that balance scale, adjacency, and use a mix to create a visually appealing destination. The Plaza District design emphasizes clean building exteriors and an extensive use of glass. The design would use the movement of water in important public spaces to engage and attract pedestrians, creating great settings for public gatherings. The design would extend the tranquility of the site using landscaped streets and sidewalks. Other facilities within the proposed project would incorporate fountains and other gathering spaces. Parking would be limited to on-street and multi-level structures to avoid locating off-street parking in front of building entrances.
4.6-I-23	Establish an incentive program that will provide for density and FAR bonuses for mixed use development that includes amenities for public benefit, such as workforce housing, pedestrian-oriented facilities (outdoor seating, plazas, weather protection, transit waiting areas), historic preservation, cultural facilities, public art and water features, and open space preservation. Allow credit for payment of in-lieu fees for Measure G open space preservation.	<u>Consistent:</u> The proposed project includes workforce housing, a pedestrian plaza with water feature, a Transit Center, and a six-screen arts cinema, and, therefore, is eligible for FAR bonus provided in the City Center Mixed Use (CCMU) zoning district of 1.35.

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4.6-I-24	Allow for the revitalization and intensification of infill sites within the Bishop Ranch Business Park, consistent with FAR limitations, and amend the Zoning Ordinance so that they do not inhibit appropriate infill development.	<u>Consistent:</u> A total of 681,769 square feet of office space would be developed among three buildings in the new Bishop Ranch 1A office complex. In addition, two parking garages would be constructed for office workers. This office space and parking would replace an existing 194,652 square feet of office space in four two-level buildings and current single-level surface parking, respectively. The proposed project meets the current FAR limitation of 1.35 as a single project.
4.6-I-25	Permit a diverse mix of complementary uses within Bishop Ranch to better meet the daily needs of workers and to reduce the need to travel by automobile. Approval of a use permit would be required upon finding that such uses are compatible with the primary use and do not adversely affect the traffic-carrying capacity of adjacent streets.	<u>Consistent:</u> The proposed project would provide a net increase of 1.6 million square feet of mixed-uses above existing vested entitlements, including commercial, residential, office and civic. It would include a Transit Center near City Hall to promote transit ridership. The proposed project would promote the use of pedestrian and bicycle modes of transportation by centering the Plaza District around a large pedestrian plaza, located in front of the hotel. The proposed project's location adjacent to the Iron Horse Trail would also encourage non-motorized modes of transportation. The proposed project would provide 487 high-density residential units to encourage use of adjacent office space and retail, recreational, and cultural opportunities.
4.7-I-5	Support the direction of the City Center Task Force and the City's efforts to develop the City Center as a cohesive mix of civic, compatible retail, and open space uses with an arts and entertainment focus.	<u>Consistent:</u> The proposed City Center project would provide a net increase of 1.6 million square feet of mixed-uses above existing vested entitlements, including commercial and civic uses. Commercial uses include retail shops, a hotel and theater, and restaurants, while civic uses include City services and a designated area in the Plaza District for community and cultural events. This is consistent with the City Center Task Force's vision for the proposed project.
4.8-G-1	Maintain and enhance San Ramon's identity.	<u>Consistent:</u> The design of all structures within the proposed project would include high-quality architecture and landscaping consistent with the style of Bishop Ranch that will maintain and enhance the aesthetic character of the City of San Ramon. The proposed project would strengthen San Ramon and Bishop Ranch with a vibrant mix of complementary uses including retail, residential, office, hotel, and civic. The City Hall would feature a four-story City office

Goal/ Policy No.	Applicable Policy	Consistency Determination
<i>cont.</i>		building with an attached dome-shaped Council Chambers. A cast sculpting of the City symbol--an aloft crow with extended wings--would crown the top of the dome housing the Council Chamber.
4.8-I-2	Ensure that the design, location and size of new development blends with the environment and a site's natural features.	<u>Consistent</u> : The design of all structures within the proposed project would include high-quality architecture and landscaping consistent with the style of Bishop Ranch that will maintain and enhance the aesthetic character of the City of San Ramon. The extensive use of glass will maximize views of the surrounding hills and natural landscape features.
	4.8-I-3 Establish citywide lighting standards to ensure appropriate illumination levels for residential, commercial, and industrial land uses, and that lighting is of a consistent character and quality while reducing light pollution.	<u>Consistent</u> : Mitigation is proposed that would require the project applicant to submit a lighting plan to the City identifying measures by which light will be shielded to avoid spillage onto neighboring land uses. Refer to Section 4.1, Aesthetics, Light, and Glare for further discussion.
4.8-I-5	Encourage the linkage and integration of new development with existing neighborhoods by means of open space areas, parks, and pathways as a means of enhancing pedestrian connections.	<u>Consistent</u> : The proposed project would be accessible to nearby land uses including Bishop Ranch 1, the Market Place, the Shops at Bishop Ranch, Central Park, and the Iron Horse Trail by sidewalks located along roadway frontages or dedicated pathways.
4.8-I-6	Seek to assure maximum public access to the Iron Horse Trail through land acquisition, licensing agreements with Contra Costa County, and incentives for dedication and improvement of land for trailhead parks and walkways.	<u>Consistent</u> : The proposed project's adjacency to the Iron Horse Trail will promote the use of pedestrian and bicycle modes of transportation as well as enhance the recreational opportunities of the trail.
4.8-I-7	Require new commercial and office development to provide outdoor passive recreation areas.	<u>Consistent</u> : The Plaza District would contain a plaza with water features and seating for outdoor passive recreation.
4.8-I-8	Use the development review process to ensure that new development preserves and/or enhances significant views of the natural landscape.	<u>Consistent</u> : While some obstruction of views on the surrounding hills would occur as a result of development of the proposed project, view corridors along Bishop Drive, Center Street, and Bollinger Canyon Road would be created or enhanced by the proposed project. Refer to Section 4.1, Aesthetics, Light, and Glare for further discussion.
4.8-I-9	Continue to implement landscaping guidelines for public roadways that improve their visual character.	<u>Consistent</u> : All project frontages with roadways would feature landscaping to improve their visual character. Refer to Exhibits 3-9 and 3-12.

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4.8-I-11	Require new office and commercial development to provide outdoor art that is clearly visible to the public.	<u>Consistent:</u> The Plaza District would include a pedestrian plaza with a water feature. In addition, the City Council Chambers would be topped with a cast sculpting of the City symbol—an aloft crow with extended wings.
4.8-I-12	Encourage attractive, drought-tolerant landscaping on private property that is suitable for San Ramon’s climate.	<u>Consistent:</u> The proposed project’s conceptual landscaping plan includes the use of drought-tolerant plant and tree species, as identified by East Bay Municipal Utilities District, including the California live oak, Coast live oak, valley oak, London plane tree, cherry tree, stone pine, toyon, and glossy abelia.
4.8-I-13	Require appropriate landscape treatment for public rights-of-way in all new residential, office, and commercial development.	<u>Consistent:</u> Landscaping would be provided within all project components and along roadway frontages. Refer to Exhibits 3-9 and 3-12.
4.8-I-14	Ensure that businesses provide signs that are attractive and consistent with neighboring commercial uses, minimize visual clutter from roadways and other public areas, and, where possible, cannot be seen from residential neighborhoods.	<u>Consistent:</u> The proposed project’s signage would comply with the provisions of the City Center Mixed Use (CCMU) zoning district requirements. Signage in the Plaza District would be limited to building entrances and other appropriate locations where its appearance would be visually unobtrusive and consistent with the objective of creating an upscale entertainment destination.
4.8-I-16	Maintain the predominant low building form throughout the City.	<u>Consistent:</u> As stated Policy 4.8-I-17, the City Center is allowed an exception to policies related to low building heights.
4.8-I-17	<p>Establish urban design standards in the Zoning Ordinance for large-scale office development, including:</p> <ul style="list-style-type: none"> • Limitations on maximum building height (five stories/75 feet) • Maximum vertical wall dimensions without a minimum upper-story setback or setback (four stories/65 feet) • Required upper-story setbacks above four stories (1:1) • Limitations on projections above height limits for towers, spires, and technical features, such as elevator penthouses and mechanical equipment enclosures (up to 25 percent of total roof area) • Limitations on blank walls visible from public streets, and • Sun access planes adjacent to public parks (1:3.5) to prevent substantial shadow impacts. 	<u>Consistent:</u> As stated in the policy, the City Center would be excluded from the height restriction, setback, and blank wall aspects of this policy. The policy states that the sun access plane provision would apply to the City Center project. As shown in Exhibits 4.1-7a through 4.1-7d, shadows from Plaza District buildings would not extend into Central Park and, therefore, would be consistent with the sun access plane requirements. Refer to Section 4.1, Aesthetics, Light, and Glare for further discussion.

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<i>cont.</i>	City Center would be excluded from these requirements, with the exception of the sun access plane requirements adjacent to public parks.	
4.8-I-18	Allow encroachments into the sun access plane to provide architectural flexibility. This may be done by allowing, for example, a 15-foot vertical projection above the sun access plane for up to 25 percent of the length of the lot line opposite the public park.	<u>Consistent</u> : As shown in Exhibits 4.1-7a through 4.1-7d, shadows from Plaza District buildings would not extend into Central Park and, therefore, would be consistent with the sun access plane requirements.
4.8-I-21	Require all walls and fences to be designed to minimize visual monotony.	<u>Consistent</u> : Few walls and fences would be used in this proposed project. Instead, building façades would be the most prominent visual features and would incorporate design treatments, such as color and texture variation, the use of glass, and green roof landscaping to enhance visual aesthetics.
4.8-I-22	Encourage underground parking in new development, where feasible.	<u>Consistent</u> : All three project components would provide off-street parking in parking structures. The Plaza District parking structures would include below-grade parking under certain buildings.
Traffic and Circulation		
5.1-G-1	Maintain acceptable levels of service and ensure that future development and the circulation system are in balance.	<u>Consistent</u> : The proposed project would implement roadway improvements to ensure that acceptable intersection and arterial roadway level of service meets adopted performance standards. Refer to Section 4.12, Transportation for further discussion.
5.1-I-1	Strive to maintain traffic LOS C or better as the standard at all intersections, with LOS D during no more than three peak periods of the day (a.m., p.m., and noon peaks).	<u>Consistent</u> : The proposed project would implement roadway improvements to ensure that acceptable intersection and arterial roadway level of service meets adopted performance standards. Refer to Section 4.12, Transportation for further discussion.
5.1-I-2	Require traffic impact studies for all proposed new developments which are projected to generate 50 or more peak-hour vehicle trips.	<u>Consistent</u> : DMJM Harris prepared a traffic study that analyzed the proposed project's impacts on local roadways and intersections. Refer to Section 4.12, Transportation for further discussion.
5.1-I-3	Identify and implement circulation improvements on the basis of traffic studies.	<u>Consistent</u> : The DMJM Harris traffic study identified roadway improvements necessary to mitigate for the proposed project's impacts on circulation. Refer to Section 4.12, Transportation for further discussion.

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5.2-I-5	Emphasize regional transportation demand management and trip reduction strategies as alternatives to improvements to existing facilities and the construction of new facilities.	<u>Consistent:</u> The proposed project would employ trip reduction strategies through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. It would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction through its adjacency to the Iron Horse Trail, and its siting of residential and office uses near shopping, dining, and entertainment. The proposed project's trip reduction measures were credited to its trip generation in the DMJM Harris traffic study and partially reduced the mitigation necessary to ensure that roadway performance met acceptable standards. Refer to Section 4.12, Transportation for further discussion.
5.3-I-4	Maximize the carrying capacity of arterial roadways by controlling the number of intersections and driveways, prohibiting residential access, and requiring sufficient off-street parking to meet the needs of each project.	<u>Consistent:</u> No direct driveway access to any project uses or parking structures would be taken from Bollinger Canyon Road or Camino Ramon. Instead, all driveway access would be taken from collectors or local streets. In addition, the proposed project's off-street parking capacity would exceed minimum City standards. Refer to Section 4.12, Transportation for further discussion.
5.3-I-5	Require traffic impact mitigation fees on new residential and commercial development to ensure that transportation improvements are constructed before the increased traffic causes conditions to deteriorate.	<u>Consistent:</u> The proposed project would implement roadway improvements prior to occupancy to ensure that acceptable intersection levels of service meets adopted performance standards. Refer to Section 4.12, Transportation for further discussion.
5.5-G-1	Utilize Transportation Demand Management (TDM) as an integral component of the City's transportation program to reduce total vehicle trips on San Ramon streets and to contribute to regional air quality improvements.	<u>Consistent:</u> The proposed project would employ TDM strategies through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. It would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction through its adjacency to the Iron Horse Trail, and its siting of residential and office uses near shopping, dining, and entertainment.
5.5-I-1	Cooperate with public agencies and other jurisdictions to promote local and regional public transit service in San Ramon.	<u>Consistent:</u> The proposed project includes a Transit Center that would be served by County Connection bus service to neighboring communities and the Dublin/Pleasanton and Walnut Creek BART stations.

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5.5-I-2	Encourage and assist major employers and commercial complexes to reduce the number of single-occupant vehicles by participating in the City’s Transportation Systems Management programs.	<u>Consistent</u> : The proposed project would employ trip reduction strategies through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. It would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction through its adjacency to the Iron Horse Trail, and its siting of residential and office uses near shopping, dining, and entertainment.
5.5-I-3	Support local bus service to and from regional transit lines. Bus service or other public transportation service should be included under the Initial Level of Development as part of the Dougherty Valley area. The City shall work to improve the transit service to and from San Ramon.	<u>Consistent</u> : The proposed project includes a Transit Center that would be served by County Connection bus service to neighboring communities and the Dublin/Pleasanton and Walnut Creek BART stations.
5.5-I-7	Encourage new development to include a mix of uses that will allow people to walk between destinations.	<u>Consistent</u> : The proposed project would promote the use of pedestrian use by centering the Plaza District around a large pedestrian plaza, located in front of the hotel. The plaza would be used for seasonal programs, such as farmer’s markets during the warmer months and outdoor ice-skating during the winter months. The proposed project’s location adjacent to the Iron Horse Trail would also encourage non-motorized modes of transportation. Also included in the proposed project, and within walking distance, are department stores, retail shops, restaurants, a theater, civic services, and office space.
5.5-I-9	Encourage employers and commercial complexes to emphasize public transit services or private alternatives to the single-occupant vehicle.	<u>Consistent</u> : The proposed project would promote public transit usage through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. It would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction through its adjacency to the Iron Horse Trail, and its siting of residential and office uses near shopping, dining, and entertainment.
5.5-I-10	Work with regional transit providers to situate transit stops and hubs at locations that are convenient for transit users, and promote increased transit ridership through the provision of shelters, benches, and other amenities.	<u>Consistent</u> : The proposed project would include a Transit Center that would be incorporated into the ground floor of the two-level, 414-space parking garage located on the south side of the City Hall. The Transit Center would provide four bus stalls and a waiting area for passengers. In addition, the proposed project would be served by bus routes on nearby streets including Bollinger Canyon Road, Sunset Drive, Bishop Drive, and Camino Ramon.

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5.5-I-13	Consider the construction of public parking facilities in the downtown or City Center areas to serve projected parking demand, while carefully balancing the need for adequate parking against the desire to minimize traffic growth.	<u>Consistent:</u> Public parking facilities would be built for each of the three areas of the proposed project, with a total of 6,992 parking stalls to meet a percentage of projected demand. Traffic growth would be minimized by the construction of a Transit Center near the new City Hall and the development of the pedestrian-friendly Plaza District, which includes retail and housing and is adjacent to office space.
5.6-G-1	Encourage bicycling and walking as alternatives to the automobile.	<u>Consistent:</u> The proposed project would promote the use of pedestrian and bicycle modes of transportation by centering the Plaza District around a large pedestrian plaza, located in front of the hotel. The plaza would be used for seasonal programs, such as farmer’s markets during the warmer months and outdoor ice-skating during the winter months. The proposed project’s location adjacent to the Iron Horse Trail would also encourage non-motorized modes of transportation.
5.6-I-3	Emphasize the Iron Horse Trail as a major north-south route for non-motorized transportation.	<u>Consistent:</u> The proposed project would provide several pedestrian/bicycle connections to the Iron Horse Trail that would enable convenient and safe access to and from the trail.
5.6-I-4	Require bicycle parking, storage and other support facilities as part of any new office and retail developments and public facilities.	<u>Consistent:</u> Bicycle storage facilities (e.g., racks) would be provided in all three project components.
5.6-I-5	Develop a series of continuous walkways within Bishop Ranch Business Park, commercial districts, and residential neighborhoods so they connect to one another.	<u>Consistent:</u> The proposed project would be accessible to nearby land uses including Bishop Ranch 1, The Market Place, the Shops at Bishop Ranch, Central Park, and the Iron Horse Trail by sidewalks located along roadway frontages or dedicated pathways.
5.6-I-10	Ensure that roadway improvement projects do not decrease mobility or accessibility for bicyclists or pedestrians.	<u>Consistent:</u> The proposed project would provide continuous, uninterrupted sidewalks along all street frontages in the Plaza District, Bishop Ranch 1A, and City Hall. Note that continuous, uninterrupted sidewalks do not currently exist on three sides of Bishop Ranch 2, limiting pedestrian mobility. The proposed project would also provide access to the Iron Horse Trail, a Class I bicycle facility.

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Parks and Recreation		
6.5-I-5	Require residential developers to make contributions to the City’s park system.	<u>Consistent</u> : Because of the proposed project’s location and characteristics, it would not dedicate parkland to the City’s park system. Instead, the project applicant would provide in-lieu-of parkland fees to the City to develop parks at other locations in San Ramon. Refer to Section 4.11, Public Services and Recreation for further discussion.
6.5-I-6	Encourage contributions to the City’s park system by non-residential developers.	<u>Consistent</u> : Because of the proposed project’s location and characteristics, it would not dedicate parkland to the City’s park system. Instead, the project applicant would provide in-lieu-of parkland fees to the City to develop parks at other locations in San Ramon. Refer to Section 4.11, Public Services and Recreation for further discussion.
6.5-I-7	Complete all parkland dedication requirements for each development prior to occupancy.	<u>Consistent</u> : The project applicant would provide any required in-lieu-of parkland fees at the time building permits are sought.
6.5-I-8	Encourage the development of landscaped and dedicated open spaces, parkways, trail systems, and special community service facilities in new developments.	<u>Consistent</u> : Landscaping would be provided through the proposed project. Exhibit 3-9, Exhibit 3-12, and Exhibit 3-13 depict the conceptual landscaping plans for the Plaza District, Bishop Ranch 1A, and City Hall and Transit Center components, respectively.
Public Facilities and Utilities		
7.1-G-1	Provide public and cultural facilities that contribute to the City’s positive image and enhance community identity.	<u>Consistent</u> : The proposed project contains of a mixed-use Plaza District and a City Hall. The Plaza District would feature an arts cinema, retail, restaurant, and hotel uses, and is intended to be an entertainment destination. The City Hall would include a library, a Police Department, City offices, and Council Chambers. The proposed project would add new, high-quality public and cultural facilities to the City.
7.1-I-1	Develop and implement a City Center.	<u>Consistent</u> : The proposed project is the City Center project and consists of a net increase of 1.6 million square feet of mixed uses above existing vested entitlements, including retail, office, hotel, residential, and civic. The project would be a mixed-use infill project designed to create a vibrant destination and promote the use

Goal/ Policy No.	Applicable Policy	Consistency Determination
<i>cont.</i>		of public transportation and pedestrian and bicycle modes of transportation. The proposed project consists of three components: a Plaza District, an office complex, and a City Hall and Transit Center. Section 3, Project Description details the background of the City Center concept.
7.1-I-2	Maintain City performance standards for libraries in cooperation with the Contra Costa Library System and strive to achieve superior services.	<u>Consistent:</u> The City Hall component of the project would include a new library that would replace the existing library at 100 Montgomery Street. The new library would improve the delivery and quality of library services to San Ramon residents by providing more collection space, more computer stations, enclosed group study rooms, public meeting rooms, and better acoustical controls. Refer to Section 4.11, Public Services and Recreation for further discussion.
7.2-I-2	Require that residential development pay fees to the [San Ramon Valley Unified] School District for the acquisition of school sites to provide adequate, permanent classroom space.	<u>Consistent:</u> The proposed project would provide development fees to the San Ramon Valley Unified School District for capital improvements. Refer to Section 4.11, Public Services and Recreation for further discussion.
7.3-G-1	Encourage development of private educational, cultural, childcare, and medical facilities in San Ramon.	<u>Consistent:</u> The Plaza District would provide more than 400,000 square feet of inline retail space that would be tenanted by restaurants, cafes, small shops, fitness clubs, and other types of lifestyle-oriented businesses that would create a vibrant cultural destination.
7.3-I-1	Require participation by developers of residential and nonresidential projects to assist in funding public or nonprofit facilities and services.	<u>Consistent:</u> The proposed project is subject to and will pay all applicable impact fee for public facilities and services.
7.3-I-9	Allow businesses that can benefit from close association with the Regional Medical Center to locate on adjacent sites designated for mixed use development.	<u>Consistent:</u> The San Ramon Regional Medical Center is located approximately 3,000 feet from the proposed project. This will allow for businesses associated with the proposed project the opportunity to use the medical center's services.
7.3-I-10	Evaluate the feasibility of providing off-site parking at the City Center with transportation service to the medical center.	<u>Consistent:</u> The proposed project would provide 6,992 parking spaces onsite, with most of those spaces being provided in multi-story garages. Given this capacity, there may be the possibility of providing offsite parking for the medical center.

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7.4-I-1	Cooperate with Pacific Gas and Electric Company (PG&E) to monitor future utility expansion to ensure that facilities are designed and planned with minimal impact on existing and future residents.	<u>Consistent</u> : PG&E was consulted during the preparation of this DSEIR and during project design about energy needs. PG&E indicated that there are adequate infrastructure and energy supplies available to serve the proposed project. Refer to Section 4.14, Utilities and Service Systems for further discussion.
7.4-I-3	Require new development to underground all utility lines needed to serve the future buildings and their occupants, and work with PG&E to underground utilities in existing residential neighborhoods, making the Southern San Ramon area a priority.	<u>Consistent</u> : All project utility lines would be located underground.
7.4-I-7	Encourage all new development to provide the technology to support multiple telecommunications facilities and providers.	<u>Consistent</u> : The proposed project would be able to be served by both the AT&T and Comcast telecommunications networks.
7.5-G-1	Manage solid waste so that State diversion goals are exceeded and the best possible service is provided to the citizens and businesses of San Ramon.	<u>Consistent</u> : Mitigation is proposed that would require the provision of recycling facilities in the residential and non-residential components of the proposed project. These facilities would promote waste reduction and recycling, and be consistent with the City’s goal of exceeding the State’s 50 percent waste diversion requirement. Refer to Section 4.14, Utilities and Service Systems for further discussion.
7.5-I-2	Provide and promote opportunities to reduce waste at home and in businesses, and make possible the safe disposal of hazardous materials.	<u>Consistent</u> : Mitigation is proposed that would require the provision of recycling facilities in the residential and non-residential components of the proposed project. These facilities would promote waste reduction and recycling. Refer to Section 4.14, Utilities and Service Systems for further discussion.
7.5-I-4	Require builders to incorporate interior and exterior storage areas for recyclables into new commercial and residential remodeled buildings, and encourage remodeled buildings (both residential and commercial) to make recycling activities more convenient for those who use the buildings.	<u>Consistent</u> : Mitigation is proposed that would require the provision of recycling facilities in the residential and non-residential components of the proposed project. Refer to Section 4.14, Utilities and Service Systems for further discussion.
Open Space and Conservation		
8.3-I-12	Continue participation in the Contra Costa Clean Water Program to control stormwater pollution and protect the quality of the City’s waterways.	<u>Consistent</u> : The proposed project would implement a number of stormwater pollution controls that are consistent with those identified in the Contra Costa Clean Water Program, as well as compliance with C.3 provisions. Refer to Section 4.7, Hydrology and Water Quality for further discussion.

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8.6-G-1	Improve and protect San Ramon’s air quality and promote improvements in subregional air quality.	<u>Consistent</u> : The proposed project would promote improvements in sub-regional air quality, including reduction of greenhouse gas emissions, through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers. The proposed project would also promote the use of pedestrian and bicycle modes of transportation and encourage trip reduction with its adjacency to the Iron Horse Trail, and would encourage trip and greenhouse gas reduction through the siting of residential and office uses near shopping, dining, and entertainment.
8.6-I-3	Use the City’s environmental review process to impose appropriate mitigation measures on new development to reduce impacts on air quality.	<u>Consistent</u> : The proposed project’s air quality impacts are evaluated in Section 4.2, Air Quality. Mitigation measures are proposed to reduce the proposed project’s emission of air pollutants.
8.6-I-4	Provide information to encourage the use of transportation modes that minimize motor vehicle use and resulting contaminant emissions.	<u>Consistent</u> : The proposed project would promote the use of public transportation, bicycling, and walking through the provision of a Transit Center and a mixed-use district, and through the project’s proximity to the Iron Horse Trail, the Bishop Ranch Business Park, The Shops at Bishop Ranch, the Market Place, and Central Park.
8.6-I-5	Evaluate new commercial and industrial development for potential handling, storage, and transport of hazardous materials to minimize public exposure to toxic air contaminants.	<u>Consistent</u> : The proposed project’s potential for emission of air toxics and hazardous materials usage are evaluated Section 4.2, Air Quality and Section 4.6, Hazards and Hazardous Materials.
8.6-I-6	Require businesses to comply with City ordinances that regulate the use of ozone-depleting compounds.	<u>Consistent</u> : Project tenants would be expected to comply with federal and State laws prohibiting the use of chlorofluorocarbons and other banned ozone-depleting compounds.
8.6-I-7	Support measures to reduce exhaust and particulate emissions from construction and grading activities.	<u>Consistent</u> : Section 4.2, Air Quality sets forth mitigation measures as required by the Bay Area Air Quality Management District to ensure less than significant impacts from grading and construction activities. The proposed project would be required to implement these measures during construction.

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8.7-G-1	Encourage the implementation of water quality and conservation programs and measures by San Ramon employers, residents, and service providers.	<u>Consistent</u> : The proposed project's stormwater drainage system would include structural treatment measures such as green roofs and bioswales that would sequester pollutants through percolation and prevent their release to the maximum extent feasible. Refer to Section 4.7, Hydrology and Water Quality and Section 4.14, Utility and Service Systems for further discussion.
8.7-I-2	Require new development to be equipped with water conservation devices, including the possibility of dual water systems.	<u>Consistent</u> : The proposed project would include a recycled water system for landscape irrigation, evapotranspiration-based water controllers, and water budgets for landscape irrigation to monitor and regulate outdoor water usage. Refer to Section 4.14, Utility and Service Systems for further discussion.
8.7-I-3	Continue to implement and enforce provisions of the Water Conservation and Landscape Ordinance 218.	<u>Consistent</u> : Consistent with the requirements of Ordinance 218, the proposed project includes evapotranspiration-based water controllers and drought tolerant plants. Refer to Section 4.14, Utility and Service Systems for further discussion.
8.7-I-4	Support the application of reclaimed water to reduce the demand on municipal water supplies.	<u>Consistent</u> : The proposed project's landscaped areas would be irrigated by recycled water provided by the San Ramon Valley Recycled Water Program. The Plaza District would intertie with a future San Ramon Valley Recycled Water Program recycled water line that would be installed under Camino Ramon. Bishop Ranch 1A, City Hall, and the Transit Center would intertie with a future San Ramon Valley Recycled Water Program recycled water line that would be installed under Bollinger Canyon Road. Refer to Section 4.14, Utility and Service Systems for further discussion.
8.7-I-5	Work with DERWA (Dublin San Ramon Services District and East Bay Municipal Utilities District Recycled Water Authorities) to encourage and promote water reclamation projects in the City of San Ramon.	<u>Consistent</u> : The proposed project would be served by the DERWA recycled water system and may serve as a catalyst for further expansion of the system in the surrounding area. Refer to Section 4.14, Utility and Service Systems for further discussion.
8.8-I-1	Require that new development analyze, and therefore avoid any potential impacts to archaeological, paleontological, and historic resources.	<u>Consistent</u> : The proposed project's potential to disturb or destroy archaeological, paleontological, and historic resources is evaluated in Section 4.4, Cultural Resources.

Goal/ Policy No.	Applicable Policy	Consistency Determination
Safety		
9.1-I-1	Review proposed development sites at the earliest stage of the planning process to locate any potential geologic or seismic hazards.	<u>Consistent:</u> A geotechnical study was prepared for the proposed project and identifies potential geologic and seismic hazards. Refer to Section 4.5, Geology, Soils, and Seismicity, for further analysis.
9.1-I-4	Require comprehensive geologic and engineering studies of critical structures regardless of location.	<u>Consistent:</u> A geotechnical study was prepared for the proposed project. Refer to Section 4.5, Geology, Soils, and Seismicity for further analysis.
9.1-I-5	Require geotechnical field review during the construction phase of any new development.	<u>Consistent:</u> A geotechnical study was prepared for the proposed project that set forth soil engineering recommendations. The project applicant will retain a geotechnical engineer to monitor project grading and construction to ensure that the recommendations are implemented. Refer to Section 4.5, Geology, Soils, and Seismicity for further analysis.
9.1-I-6	Require preparation of a soils report as part of the development review and/or building permit process.	<u>Consistent:</u> A soils analysis has been completed for the proposed project. Refer to Section 4.5, Geology, Soils, and Seismicity for further discussion.
9.1-I-10	Control erosion of graded areas with revegetation or other acceptable methods.	<u>Consistent:</u> Concurrent with grading activities, a Storm Water Management Plan would be implemented, which would include standard erosion control measures such as silt fencing, hydroseeding or covering exposed areas, and other standard practices. Refer to Section 4.7, Hydrology and Water Quality for further discussion.
9.3-I-1	Eliminate hazards caused by local flooding through improvements to the storm drain system and/or creek corridors.	<u>Consistent:</u> The proposed project would install onsite drainage collection and conveyance facilities to ensure that the potential for flooding is abated. The proposed project would also re-route the existing 96-inch storm drain that runs through Bishop Ranch 1 to South San Ramon Creek to avoid areas that would be developed as structures. Refer to Section 4.7, Hydrology and Water Quality for further discussion.
9.3-I-2	Require new development to prepare hydrologic studies to assess storm runoff impacts on the local and subregional storm drainage systems and/or creek corridors.	<u>Consistent:</u> A preliminary hydrology study was prepared for the proposed project. Refer to Section 4.7, Hydrology and Water Quality for the hydrologic analysis.
9.3-I-3	Require new development to provide for the perpetual funding and ongoing maintenance of detention basins. Maintenance may be by the City under contract, by a private entity, or by another public agency.	<u>Consistent:</u> Storm water detention would be provided in green roofs and bioswales. These areas would be part of the landscaped areas of the proposed project and would be maintained by project maintenance personnel.

Goal/ Policy No.	Applicable Policy	Consistency Determination
9.4-I-1	Require site design features and fire retardant building materials to reduce the risk of fire within the City.	<u>Consistent</u> : The proposed project’s structures would comply with the California Building Standards Code, including the applicable provisions related to fire prevention and safety.
9.4-I-5	Require sprinklers in all mixed use development to protect residential uses from non-residential uses, which typically pose a higher fire risk.	<u>Consistent</u> : The proposed project would include sprinkler systems in residential and non-residential uses.
Noise		
10.1-I-1	Minimize vehicular and stationary noise sources and noise emanating from temporary activities.	<u>Consistent</u> : Mitigation is proposed to limit short-term construction noise from heavy equipment and stationary equipment. Refer to Section 4.9, Noise for further discussion.
10.1-I-2	Require a noise study for all projects that have noise exposure greater than “normally acceptable” levels....	<u>Consistent</u> : This DSEIR contains analysis of the proposed project’s noise impacts. Refer to Section 4.9, Noise for further discussion.
10.1-I-4	Include noise attenuation measures in new developments that expose the community to greater than “normally acceptable” noise levels.	<u>Consistent</u> : Noise attenuation mitigation measures are proposed where noise levels would exceed normally acceptable levels. Refer to Section 4.9, Noise for further discussion.
10.1-I-5	Discourage the use of sound walls.	<u>Consistent</u> : The proposed project would not employ the use of sound walls to mitigate for noise exposure. Refer to Section 4.9, Noise for further discussion.
10.1-I-6	<p>Require developers to reduce the noise impacts of new development on adjacent properties through appropriate means, including, but not limited to, the following actions:</p> <ul style="list-style-type: none"> • Screen and control noise sources, such as parking and loading facilities, outdoor activities and mechanical equipment, • Increase setbacks for noise sources from adjacent dwellings, • Retain fences, walls, and landscaping that serve as noise buffers, • Use soundproofing materials and doubleglazed windows, • Control hours of operation, including deliveries and trash pickup, to minimize noise impacts, and • As a last resort, construct noise walls along highways and arterials when compatible with aesthetic concerns and neighborhood character. This would be a developer responsibility. 	<u>Consistent</u> : The proposed project would not expose adjacent land uses to noise levels in excess of normally acceptable levels and, therefore, would not need to mitigate for such impacts. Refer to Section 4.9, Noise for further discussion.

Goal/ Policy No.	Applicable Policy	Consistency Determination
10.1-I-9	Implement the City’s regulations and performance standards for noise control to ensure appropriate regulation of common residential, commercial, and industrial noise sources.	<u>Consistent</u> : The City’s regulations and performance standards for noise control were used as the basis for evaluating the proposed project’s noise impacts. Refer to Section 4.9, Noise for further discussion.
10.1-I-10	Require new noise sources to use best available control technology (BACT) to minimize noise from all sources.	<u>Consistent</u> : Where such technology is available, project stationary noise sources uses BACT. Refer to Section 4.9, Noise for further discussion.
Housing		
11.9-G-1	Provide a range of opportunities for affordable housing.	<u>Consistent</u> : The proposed project would provide inclusionary workforce dwelling units onsite and would provide in-lieu of fees.
11.9-I-2	Require residential developments with more than 10 housing units to provide Below Market Rate (BMR) units through new construction, donation of land, or payment of in-lieu fees. A minimum of 25 percent of all residential developments shall be constructed as BMR units, with guarantees of continued affordability for 50 years.	<u>Consistent</u> : The proposed project would provide inclusionary workforce dwelling units onsite and would provide in-lieu of fees to develop below-market rate housing elsewhere in the City to cover the balance not provided onsite.
11.10-G-1	Promote a full range of housing types, size, location, and price to permit a choice of housing for a variety of economic levels.	<u>Consistent</u> : The proposed project would provide up to 487 high-density residential units ranging in size from 750 to 2,000 square feet in mixed-use development. The proposed project would be a “lifestyle center,” which is a type of development that does not currently exist in San Ramon. The proposed project would also provide inclusionary workforce dwelling units and would provide in-lieu-of fees to develop below-market rate housing elsewhere in the City.
11.10-I-4	Promote a combination of residential, retail, and office uses in areas designated for mixed use.	<u>Consistent</u> : Parcels 1A, 1B, 2, and 3A are zoned Mixed-Use and the proposed project would develop residential, retail, and office uses on these parcels.
11.10-I-5	The City will promote mixed-use development by offering a number of incentives, including use of redevelopment housing set-aside funds to support the housing component, non-housing redevelopment funds for the retail/commercial component, priority processing, and consideration for potential parking reductions. Develop and implement a homeownership assistance program, giving priority to public services employees, residents, and employed workers of San Ramon.	<u>Consistent</u> : The proposed project is a mixed-use project that contains 487 dwelling, including workforce housing. By virtue of being a co-applicant on the project, the City is directly promoting the development of this type of development.

Goal/ Policy No.	Applicable Policy	Consistency Determination
11.10-I-7	Require diversity in unit-size within multi-family housing projects to ensure that 3- and 4-bedroom units are provided for large families.	<u>Consistent</u> : The proposed project would provide up to 487 high-density residential units ranging in size from 750 to 2,000 square feet. The larger units would provide three- and four-bedroom units that could be tenanted by large families.
11.12-I-5	Disperse below-market housing throughout residential neighborhoods, and ensure that affordable units are essentially indistinguishable from surrounding market-rate units.	<u>Consistent</u> : The proposed project would contain inclusionary work force dwelling units dispersed throughout the various residential components of the Plaza District. These units will be similar in design and appearance to surrounding units.
11.13-I-2	Encourage developers to provide amenities for a diversity of families, including single heads of households, the disabled, senior citizens, and extended families.	<u>Consistent</u> : The Plaza District would provide a range of amenities for various lifestyles, including retail, restaurants, a six-screen cinema, a seasonal skating rink, a seasonal farmer's market, and outdoor plaza.
11.14-G-1	Promote energy conserving practices in the construction, renovation, and maintenance of San Ramon's housing units.	<u>Consistent</u> : The dwelling units developed as part of the proposed project would adhere to the 2005 Title 24 energy efficiency requirements, which are the most stringent energy efficiency standards in the nation.
11.14-I-2	Enforce the State's energy conservation standards for new residential construction and renovations to existing structures.	<u>Consistent</u> : The dwelling units developed as part of the proposed project would adhere to the 2005 Title 24 energy efficiency requirements, which are the most stringent energy efficiency standards in the nation.
11.14-I-3	Encourage innovative designs to maximize passive energy efficiencies, while retaining compatibility with surrounding neighborhoods.	<u>Consistent</u> : A principal architectural element that has been incorporated into the proposed project is the use of glass to promote natural daylight in building interiors. The use of glass is consistent with the appearance of surrounding structures in the Bishop Ranch Business Park.
Source: Michael Brandman Associates, 2007.		

Summary of Project Consistency With General Plan

The development of a City Center project is clearly addressed by the City of San Ramon General Plan. As indicated by several policies, as well as related supporting language, the General Plan envisions the City Center concept as a vibrant civic, cultural, and entertainment destination intended to be an activity center during all hours of the day, on both weekdays and weekends. In recognition of the evolution of the City Center concept over time (refer to Section 3, Project Description for further discussion), the General Plan provides significant flexibility in regards to scale, intensity, end uses, and other critical design features to allow for creativity and innovation in designing a project with such unique characteristics. This was affirmed by the San Ramon electorate when they approved the General Plan in March 2002.

The proposed project meets the General Plan's conceptual objectives for the City Center. It provides a City Hall with a Council Chamber, library, and police headquarters that satisfy the civic hub component of the City Center vision. The project would provide a Plaza District with a cinema, retail uses, and an outdoor plaza that fulfill the objective of creating a vibrant cultural and entertainment destination. The residential, office, and hotel uses of the project complement this component and create a constituency of patrons for the Plaza District, thereby enhancing the viability of the project as a daytime and nighttime destination throughout the week. Overall, while the General Plan did not place any prescriptive limits on the intensity of the City Center, proposed project is within the foreseeable range of development intensity implied by General Plan's conceptual objectives for the City Center.

In summary, the proposed project is consistent with the General Plan's vision of a City Center. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Zoning Ordinance Consistency

Impact LU-3: **The proposed project would be consistent with the City of San Ramon Zoning Ordinance.**

Impact Analysis

The parcels on the proposed project site are zoned City Center Mixed Use (CCMU) and Administrative Office, Height Overlay (OA-H) by the San Ramon Zoning Ordinance. Below is a discussion of each project component's consistency with these Zoning Ordinance designations.

Plaza District

Parcels 2 and 3A are designated City Center Mixed Use (CCMU) by the Zoning Ordinance. The Plaza District would include (but would not be limited to) such tenants as accessory retail and services, banks, eating and drinking establishments, fitness and health facilities, general retail, mixed-use residential, professional offices, parking facilities, and theaters. All of these uses would be consistent with allowed uses of the City Center Mixed Use (CCMU) zoning district. The hotel and cinema would be required to obtain Use Permits, and other uses (e.g., eating and drink establishments, fitness and health, parking structures) would be required to obtain minor use permits. Several Plaza District structures would be more than 85 feet above grade; however, there are no height restrictions for buildings within City Center Mixed Use (CCMU) zoning district.

Bishop Ranch 1A

The City-owned portion of Parcel 1A is designated City Center Mixed Use (CCMU), and the Sunset Development-owned portion is designated Administrative Office, Height Overlay (OA-H). The Bishop Ranch 1A office structures would be developed on the City-owned portion of Parcel 1A. Professional office space is an allowed use within the City Center Mixed Use (CCMU) zoning district. The Bishop Ranch 1A office structures would be approximately 110 feet above grade; however, there are no height restrictions for buildings within the City Center Mixed Use (CCMU) zoning district.

The Bishop Ranch 1 and the Bishop Ranch 1A parking structures would be developed on the Sunset Development-owned portion of Parcel 1A. Parking structures are an allowed use within the Administrative Office (OA) designation with a minor use permit. The parking structures, including one additional future shared structure, would be approximately 40 feet above grade, which is within the 55-foot height limit of the Administrative Office (OA) zoning district, and they would not require the benefit associated with a height overlay.

City Hall and Transit Center

Parcel 1B is designated City Center Mixed Use (CCMU). City Hall would contain government offices and a public safety facility (the Police Department), which are allowed uses within the City Center Mixed Use (CCMU) zoning district. The Transit Center would contain a public parking facility and a transit station, which are also allowed uses within the City Center Mixed Use (CCMU) zoning district. The parking facility would be required to obtain a minor use permit. The City Hall would be approximately 70 feet above grade and the Transit Center would be approximately 28 feet above grade; however, there are no height restrictions for buildings within the City Center Mixed Use (CCMU) zoning district.

Density Bonus

The proposed project has a 1.27 FAR. The Zoning Ordinance establishes 0.70 FAR for City Center Mixed Use (CCMU) zone, but allows a density bonus of up to 1.35 FAR if affordable housing and significant public benefits or amenities such as public art and plazas, public facilities, or a transit facility are included. The proposed project would meet the requirements for the density bonus because it would include affordable housing, a public plaza, a City Hall with a Council Chamber, library, and police headquarters, and a transit center. Therefore, the proposed project's 1.27 FAR is consistent with the Zoning Ordinance provisions.

Other Zoning Requirements

The Zoning Ordinance establishes various additional requirements for the City Center Mixed Use (CCMU) zone:

- Setbacks from Residential Zoning Districts
- Design considerations, including:

- Internal compatibility between residential and non-residential uses
- Ensuring that residential uses are protected from light, glare, and noise
- Pedestrian accessibility
- Compatibility with surround land uses

The proposed project's mixed-uses are not adjacent to any residential zoning district and, therefore, no set backs are required. In regards to the design considerations, these issues are addressed in further detail in Section 4.1, Aesthetics, Light, and Glare; Section 4.9, Noise; and Section 4.12 Transportation. In all cases, the proposed project would be consistent with these requirements.

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

4.9 - Noise

4.9.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Noise Impact Analysis prepared in June 2007 by Michael Brandman Associates. The entirety of the Noise Impact Analysis is contained in Appendix G.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all noise impacts were less than significant after mitigation in Section 4.8 of the document. The General Plan EIR found that some new development proposed by the General Plan may be in areas with ambient noise levels in excess of what is normally considered acceptable for sensitive receptors, including mixed use sites such as the City Center, but concluded that after mitigation, the impact would be less than significant. See General Plan EIR, Impacts 4.8-a through 4.8-c and Figure 4.8-2.

The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all noise impacts were less than significant after mitigation in Section 4.4 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSIER accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project and new analysis is provided for potential impacts not previously considered in those documents.

4.9.2 - Environmental Setting

Noise Fundamentals

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit that expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the

audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear.

Noise Descriptors

Noise-equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels. The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak traffic hour L_{eq} is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (L_{dn}) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. The Community Noise Equivalent Level (CNEL) is similar to the L_{dn} , except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These adjustments are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason, the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of San Ramon relies on the CNEL noise standard to assess transportation-related impacts on noise-sensitive land uses.

Traffic Noise Propagation

Traffic noise is analyzed as a line source noise, where the noise levels are normalized throughout a roadway segment. In order to assess the noise levels at different locations near the roadway, the roadway noise, the trajectory of the path from the source to receiver, and the location of the receiver are all considered in the noise prediction analysis. This analysis method is known as the source-path-receiver concept. In general, noise control measures can be applied to each of these three elements.

Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For traffic, a drop-off rate of 4.5 dBA per doubling of distance is typically observed over soft ground with landscaping, compared with a 3.0 dBA drop-off rate over hard ground such as asphalt, concrete, stone and very hard, packed earth. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

Traffic Noise Prediction

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires.

Because of the logarithmic nature of traffic noise levels, a doubling of the traffic noise (acoustic energy) results in a noise-level increase of 3 dBA. Based on the FHWA community noise assessment criteria, this change is “barely perceptible.” In other words, doubling the traffic volume (assuming that the speed and truck mix do not change) results in a noise increase of 3 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. For a noise barrier to work, it must be high enough and long enough to block the view of a road. A noise barrier is most effective when placed close to the noise source or receiver. A noise barrier can achieve a 5-dBA noise-level reduction when it is tall enough to break the line of sight. When the noise barrier is a berm instead of a wall, the noise attenuation can be increased by another 3 dBA.

Construction Noise

FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table 4.9-1 below provides a list of the construction equipment measured along with the associated measured noise emissions and measured percentage of typical equipment use per day. From this data, the FHWA developed the Roadway Construction Noise Model, which may be used for the prediction of construction noise.

Table 4.9-1: Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec 721.560 L _{max} at 50 ft (dBA, slow)	Actual Measured L _{max} at 50 ft (dBA, slow)	No. of Actual Data Samples (Count)
All other equipment > 5 HP	No	50	85	N/A	0
Auger drill rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar bender	No	20	80	N/A	0
Blasting	Yes	N/A	94	N/A	0
Boring jack (power)	No	50	80	83	1

Table 4.9-1 (Cont.): Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec 721.560 L _{max} at 50 ft (dBA, slow)	Actual Measured L _{max} at 50 ft (dBA, slow)	No. of Actual Data Samples (Count)
Chain saw	No	20	85	84	46
Clam shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete batch plant	No	15	83	N/A	0
Concrete mixer truck	No	40	85	79	40
Concrete pump	No	20	82	81	30
Concrete saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill rig truck	No	20	84	79	22
Drum mixer	No	50	80	80	1
Dump truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flatbed truck	No	40	84	74	4
Front-end loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	N/A	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal boring hydraulic jack	No	25	80	82	6
Hydra break ram	Yes	10	90	N/A	0
Impact pile driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man lift	No	20	85	75	23
Mounted impact hammer (hoe ram)	Yes	20	90	90	212
Pavement scarafier	No	20	85	90	2
Paver	No	50	85	77	9

Table 4.9-1 (Cont.): Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec 721.560 L _{max} at 50 ft (dBA, slow)	Actual Measured L _{max} at 50 ft (dBA, slow)	Count of Actual Data Samples
Pickup truck	No	40	55	75	1
Pneumatic tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator unit	No	100	82	73	3
Rivet buster/chipping gun	Yes	20	85	79	19
Rock drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand blasting (single nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry plant	No	100	78	78	1
Slurry trenching machine	No	50	82	80	75
Soil mix drill rig	No	50	80	N/A	0
Tractor	No	40	84	N/A	0
Vacuum excavator	No	40	85	85	149
Vacuum street sweeper	No	10	80	82	19
Ventilation fan	No	100	85	79	13
Vibrating hopper	No	50	85	87	1
Vibratory concrete mixer	No	20	80	80	1
Vibratory pile driver	No	20	95	101	44
Warning horn	No	5	85	83	12
Welder/torch	No	40	73	74	5

Source: FHWA, January 2006.

Groundborne Vibration Fundamentals

Groundborne vibration consists of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically cause a nuisance only to people, but at extreme vibration levels, damage to buildings may occur. Although groundborne vibration can be felt outdoors, it is typically an annoyance only to people indoors, where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may consist of the rattling of windows or dishes on shelves.

Vibration Descriptors

Vibration is quantified through the measurement of the motion of a particular point on the ground or structure. Since the current available vibration measurement devices measure either the velocity or acceleration of the ground or structure, vibratory motion is commonly described by identifying the peak particle velocity (PPV) or peak particle acceleration (PPA). The PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage. However, for human response, an average vibration amplitude is more appropriate, since it takes time for the human body to respond to the vibration. Since the average particle velocity over time is zero, the root-mean-square amplitude of the vibration velocity is typically used to assess human response. The root-mean-square values are always less than PPV, and for typical single-frequency conditions, the root-mean-square value is about 70 percent of the PPV.

Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels, is denoted as L_v , and is based on the root-mean-square velocity amplitude. A commonly used abbreviation is VdB, which, in this text, is L_v based on the reference quantity of 1 micro-inch per second.

Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Offsite sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Generally, the thresholds of perception and annoyance are higher for transient sources than continuous sources. Table 4.9-2 shows PPV levels for continuous and transient sources and the associated human response.

Table 4.9-2: Vibration Levels and Human Response

Peak Particle Velocity (inches/second)		Human Response
Continuous	Transient	
0.40	2.00	Severe
0.10	0.90	Strongly perceptible
0.04	0.25	Distinctly perceptible
0.01	0.04	Barely perceptible

Source: California Department of Transportation, 2004.

Vibration Propagation

The propagation of groundborne vibration is not as simple to model as airborne noise. This is caused by noise in the air that travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh

waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature, and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

Construction-Related Vibration Level Prediction

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings near construction activities respond to these vibrations with varying results, ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table 4.9-3 gives approximate vibration levels for particular construction activities. The data in the table provides a reasonable estimate for a wide range of soil conditions.

Table 4.9-3: Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second)	Approximate Vibration Level (L _v) at 25 feet
Pile driver (impact)	1.518 (upper range) 0.644 (typical)	112 104
Pile driver (sonic)	0.734 (upper range) 0.170 (typical)	105 93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall)	0.008 (soil) 0.017 (rock)	66 75
Vibratory roller	0.210	106
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: California Department of Transportation, 2004. Federal Transit Administration, 1995.		

Existing Noise Environment

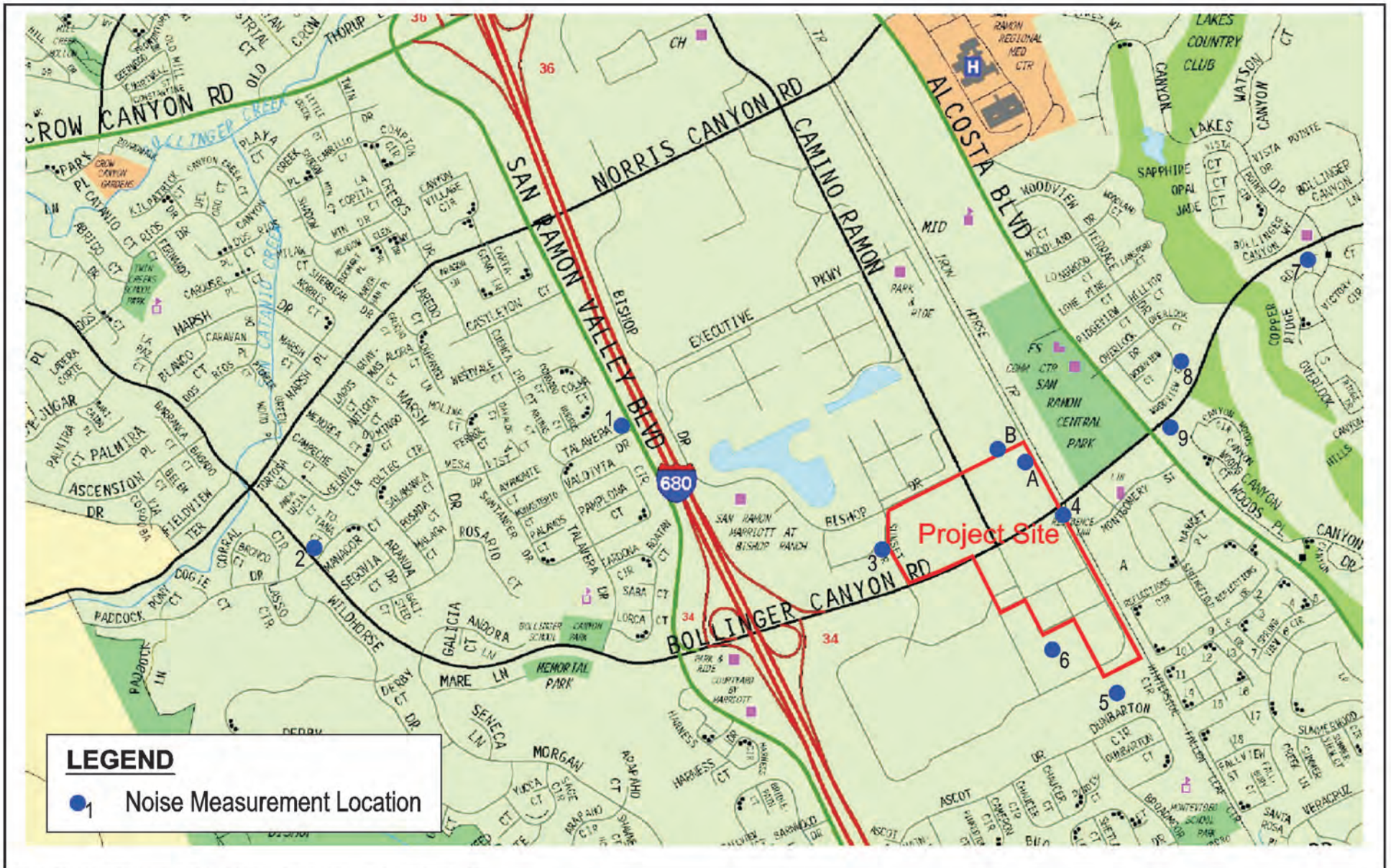
To determine the existing noise environment, short-term, peak-hour noise measurements were taken at nine locations in the project study area, and 24-hour noise measurements were taken at two locations on the project site in June 2007. These measurements were then used to calculate ambient noise levels, both on and around the project site.

Noise Measurement Locations

The project site is located in a developed area. The project site is generally bounded by Bishop Drive and Bishop Ranch 3 to the north, Iron Horse Trail, the Market Place and the Reflections Condominiums to the east, a Bishop Ranch 1 surface parking area and single-family residential area to the south, and Chevron Park, Sunset Drive, and the Shops at Bishop Ranch to the west. Besides the local roadways, the project site is primarily impacted by noise from Interstate 680 (I-680), which is located approximately 1,400 feet west of Bishop Ranch 2.

The offsite, short-term, peak-hour noise monitoring locations were selected on basis of the potential for impacts from noise level increases that are due to the development of the proposed project. Each site is described below. The short-term measurement locations are shown on Exhibit 4.9-1.

- Site 1 is located approximately 50 feet west of the centerline of San Ramon Valley Boulevard, approximately 25 feet north of the centerline of Talavera Drive, and approximately 120 feet west of the right-of-way for I-680.
- Site 2 is located approximately 50 feet west of the centerline of Bollinger Canyon Road and approximately 25 feet north of the centerline of Aranda Drive.
- Site 3 is located approximately 50 feet west of the centerline of Sunset Drive and approximately 50 feet south of The Shops at Bishop Ranch.
- Site 4 is located approximately 100 feet south of the centerline of Bollinger Canyon Road and approximately 50 feet east of the centerline of Bishop Ranch East.
- Site 5 is located in the southwest Bishop Ranch 1 surface parking area near Chevron Park.
- Site 6 is located approximately 20 feet north of the water feature located in Bishop Ranch 1.
- Site 7 is located approximately 90 feet south of the centerline of Bollinger Canyon Road and approximately 240 feet west of Canyon Lakes Drive.
- Site 8 is located approximately 50 feet southeast of the centerline of Woodview Circle and approximately 250 feet northwest of the centerline of Bollinger Canyon Road.
- Site 9 is located approximately 200 feet northeast of the centerline of Alcosta Boulevard and approximately 50 feet southeast of the centerline of Bollinger Canyon Road.



Source: Vista Environmental and Thomas Guides Digital Edition, 2007.



Not to Scale

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Exhibit 4.9-1 Noise Measurement Locations

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The noise measurements were recorded between 3:20 p.m. and 6:20 p.m. on June 4, 2007 and between 7:10 a.m. and 9:35 a.m. on June 5, 2007. On June 4, 2007, the temperature was 76 degrees Fahrenheit, barometric pressure was 29.50 inches of mercury, with wind gusts up to 8 miles per hour during the noise measurement readings. On June 5, 2007, the temperature was 60 degrees Fahrenheit, barometric pressure was 29.47 inches of mercury, and the wind speed was around 5 miles per hour during the noise measurement readings.

The onsite 24-hour noise monitoring locations were selected in order to assess the existing ambient noise levels currently impacting the project site and to determine the noise generated from a parking structure. The 24-hour measurement locations are shown in Exhibit 4.9-1.

- Site A is located approximately 160 feet southeast of the southern Bishop Ranch 3 parking structure and approximately 25 feet from the centerline of Iron Horse Trail on Parcel 3A.
- Site B is located approximately 20 feet from the south side and 75 feet from the east side of the southern Bishop Ranch 3 parking structure, on Parcel 3A.

Noise Measurement Results

Short-Term Peak Hour Measurement Results

The results of the offsite short-term peak hour noise level measurements are presented in Table 4.9-4. Except for Site 6, which measured the steady noise from the water feature, all other noise level measurements were monitored for a minimum period of 10 minutes. The existing noise level measurements ranged from 51.6 to 72.5 dBA L_{eq} , with the highest noise measurement at Site 9.

Table 4.9-4: Existing Ambient Offsite, Short-Term Noise Level Measurements

Site No.	Site Description	Primary Noise Source	Start Time and (Measurement Length - Minutes)	Noise Level (dBA L_{eq})
1	San Ramon Valley Boulevard, near Talavera Drive	Traffic noise from I-680 and San Ramon Valley Boulevard.	3:22 p.m. (15:30) 7:11 a.m. (10:01)	71.8 71.9
2	Bollinger Canyon Road near Aranda Drive.	Traffic noise from Bollinger Canyon Road.	3:53 p.m. (12:00) 7:26 a.m. (10:30)	65.0 65.5
3	Sunset Drive near The Shops at Bishop Ranch.	Traffic noise from Sunset Drive.	4:16 p.m. (11:00) 7:50 a.m. (10:00)	67.1 65.1
4	Bollinger Canyon Road near Bishop Ranch East.	Traffic noise from Bollinger Canyon Road.	4:34 p.m. (11:30) 8:04 a.m. (10:30)	64.6 63.9
5	Southwest Bishop Ranch 1 surface parking area near Chevron Park	Traffic noise from I-680.	4:51 p.m. (10:00) 8:18 a.m. (10:00)	51.6 52.0
6	Bishop Ranch 1 water feature	Water feature noise.	5:06 p.m.(5:00) 8:34 a.m. (4:00)	66.3 66.2

Table 4.9-4 (Cont.): Existing Ambient Offsite, Short-Term Noise Level Measurements

Site No.	Site Description	Primary Noise Source	Start Time and (Measurement Length - Minutes)	Noise Level (dBA L _{eq})
7	Bollinger Canyon Road near Canyon Lakes Drive	Traffic noise from Bollinger Canyon Road.	5:28 p.m. (12:30) 8:46 a.m. (11:59)	69.6 70.0
8	Woodview Circle near Bollinger Canyon Road.	Traffic noise from Bollinger Canyon Road and I-680.	5:49 p.m. (11:30) 9:04 a.m. (10:00)	50.8 52.6
9	Alcosta Boulevard near Bollinger Canyon Road.	Traffic noise from Bollinger Canyon Road and Alcosta Boulevard.	6:09 p.m. (11:00) 9:21 a.m. (11:30)	72.5 70.4

Notes:
Weather conditions for June 4, 2007 p.m.: partly cloudy, temperature 76 degrees Fahrenheit, barometric pressure 29.50 inches of mercury, with wind gusts up to 8 miles per hour. For June 5, 2007 a.m.: Partly cloudy, temperature 60 degrees Fahrenheit, barometric pressure 29.47 inches of mercury, and the wind speed was around 5 miles per hour.
Source: Michael Brandman Associates, 2007.

The noise level measurements were taken during both the peak afternoon and morning traffic periods. The noise level difference between the two measurements time are all within 1 dBA except for Site 3, where there was noticeably less traffic entering The Shops at Bishop Ranch during the morning peak hour and for Sites 8 and 9, where the morning noise measurements were taken towards the end of the morning peak traffic period.

The noise measurement results show that except for Sites 5 and 8, the remaining sites exceed the City's exterior noise standards of 60 dBA for noise-sensitive residential areas. The noise monitoring data printouts are included in Appendix G. According to Section N-2230 of the Caltrans Technical Noise Supplement, the CNEL values are generally within plus or minus 2 dBA of the measured peak hour L_{eq} dBA.

24-Hour Measurement Results

The two, onsite, 24-hour measurements were taken from 10:53 p.m. on June 4, 2007 until 11:12 a.m. on June 5, 2007. Site A was positioned to capture the ambient noise of the project site, without the noise impacts from the local roadways. Site B was positioned to capture the noise levels generated from the southern Bishop Ranch 3 parking structure. At 2:30 p.m. on June 4, 2007, there were 311 vehicles parked in the parking structure, and it is assumed approximately that number of vehicles enter and leave the parking structure each day. Around 10 a.m. on June 5, 2007, maintenance workers were scraping peeling paint off the parking structure and utilizing a gas powered vacuum to pick up the paint flakes, which is not part of the typical daily maintenance, so the measured parking structure noise levels should be considered as worst-case noise levels for a parking structure.

The measured sound pressure levels in dBA have been used to calculate the minimum and maximum L_{eq} averaged over 10-minute intervals, and the 24-hour CNEL, which are shown in Table 4.9-5 along

with the measured L_{eq} averaged over the entire measurement time. In addition, a graph of the calculated L_{eq} averaged over 10 minute intervals for both 24-hour measurements is shown in Exhibit 4.9-2.

Table 4.9-5: Existing (Ambient) Onsite, 24-Hour Noise Level Measurements

Site No.	Site Description	24-Hour Average (dBA L_{eq})	Minimum 10 Minute Interval (dBA L_{eq} /Time)	Maximum 10 Minute Interval (dBA L_{eq} /Time)	24-Hour Average (dBA CNEL)
A	Located approximately 160 feet southeast of the southern Bishop Ranch 3 parking structure and approximately 25 feet from the centerline of Iron Horse Trail in the northeast corner of Parcel 3A	52.5	43.6/ 1:25 a.m.	59.3/ 4:25 p.m.	58.0
B	Located approximately 20 feet from the south side and 75 feet from the east side of the southern Bishop Ranch 3 parking structure, in the northeast corner of Parcel 3A.	55.7	44.1/ 1:34 a.m.	71.1/ 10:31 a.m.	59.4

Source: Michael Brandman Associates, 2007.

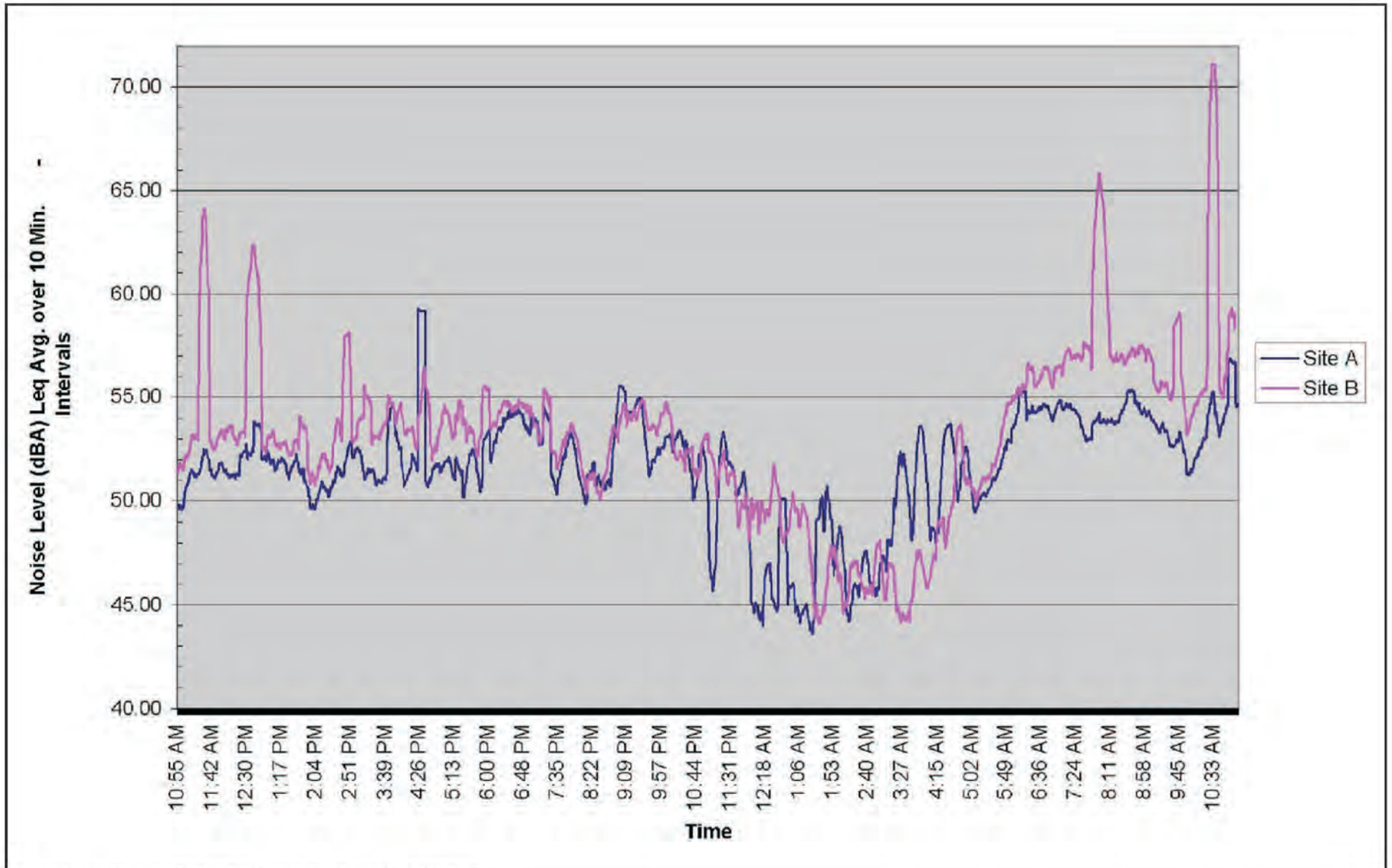
As shown in the above table, the existing ambient noise level for the northern portion of the project site, represented by Site A, is 52.5 dBA, which is consistent with the short-term peak noise measurements for Site 5, which measured the ambient noise levels at the southern portion of the project site. Table 4.9-5 and Exhibit 4.9-2 also show that the southern Bishop Ranch 3 parking structure produces a noise level of 3.2 dBA L_{eq} above the ambient noise level. The 24-hour hour noise monitoring data printouts are included in Appendix G.

Existing Roadway Noise Volumes

The calculated existing condition noise contours are shown below in Table 4.9-6. As shown in the table, at 100 feet the analyzed segments of: San Ramon Valley Boulevard (except for north of Norris Canyon Road), Sunset Drive north of Bollinger Canyon Road, Alcosta Boulevard north of Montevideo Road, Dougherty Road, Crow Canyon Road, and the east-west portion of Bollinger Canyon Road currently exceed the City’s 60-dBA CNEL standard. The noise levels from all analyzed roadway segments range from 48.5 to 68.1 dBA CNEL.

Table 4.9-6: Existing Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	55.6	RW	RW	51	110
	North of Norris Canyon Road	57.1	RW	RW	64	139
	South of Norris Canyon Road	59.6	RW	44	94	203
San Ramon Valley Boulevard	North of Crow Canyon Road	61.8	RW	61	131	283
	North of Norris Canyon Road	59.7	RW	44	95	206
	North of Bollinger Canyon Road	61.4	RW	58	125	269
	South of Bollinger Canyon Road	63.8	39	83	180	387
	South of Montevideo Drive	62.4	RW	67	144	310
Sunset Drive	South of Bishop Drive	57.8	RW	RW	72	155
	North of Bollinger Canyon Road	60.0	RW	47	100	216
Camino Ramon	North of Crow Canyon Road	58.0	RW	RW	74	159
	North of Norris Canyon Road	59.9	21	46	98	212
	North of Executive Parkway	59.7	21	44	95	205
	North of Bishop Drive	59.7	RW	44	95	205
	North of Bollinger Canyon Road	59.9	RW	46	99	214
	South of Bollinger Canyon Road	54.3	RW	RW	42	90
Bishop Ranch East	South of Bollinger Canyon Road	48.5	RW	RW	RW	RW
Market Place	South of Bollinger Canyon Road	57.0	RW	RW	63	137



Source: Extech Model 407780 Type 2 Integrating Sound Level Meter.



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Exhibit 4.9-2 24-Hour Noise Measurement Graph

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Table 4.9-6 (Cont.): Existing Noise Contours

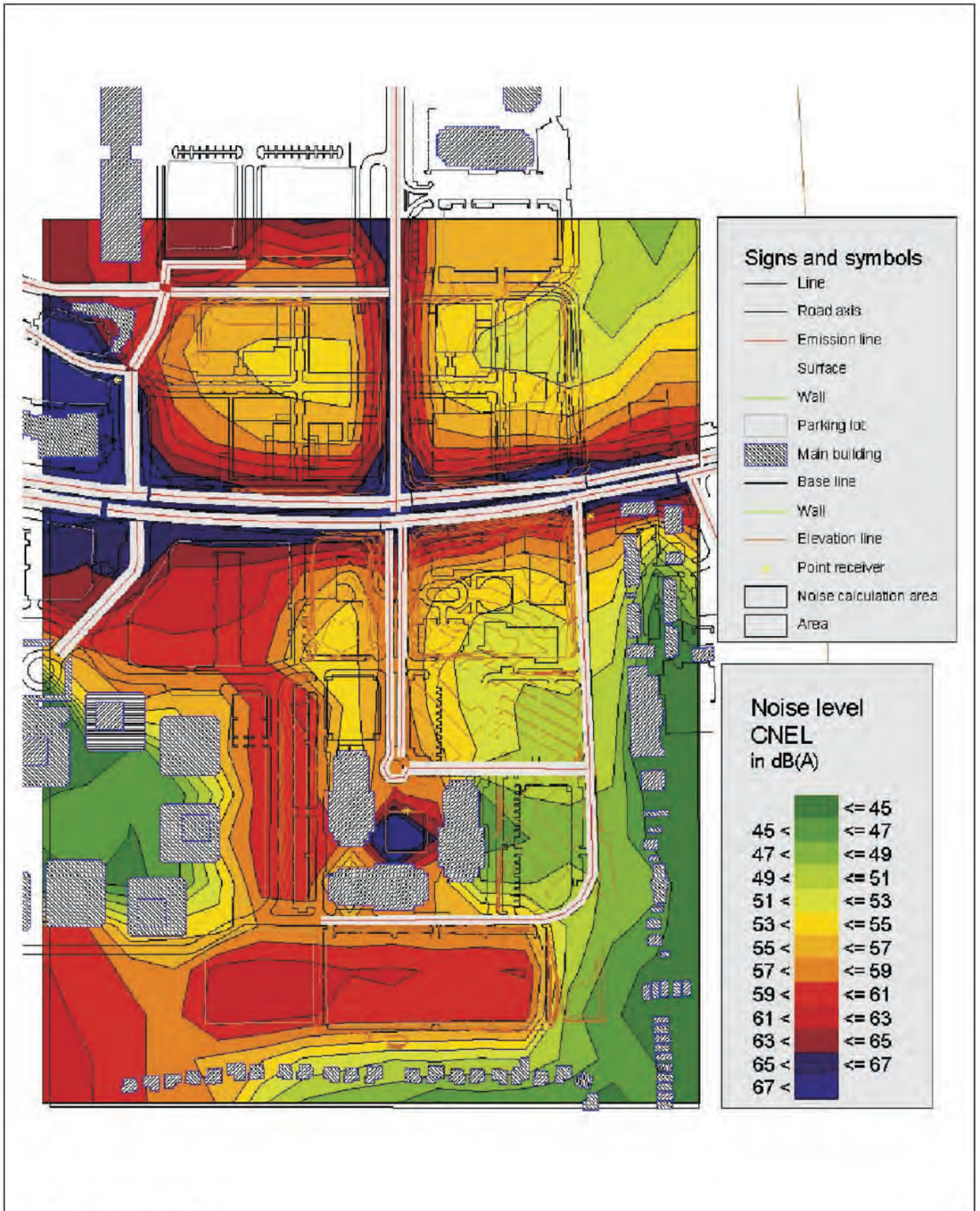
Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Alcosta Boulevard	North of Norris Canyon Road	61.9	RW	62	133	287
	North of Bollinger Canyon Road	62.3	RW	66	142	306
	South of Bollinger Canyon Road	62.6	RW	69	148	319
	South of Montevideo Drive	60.0	RW	46	100	216
	North of Old Ranch Road	59.2	RW	41	88	189
	South of Old Ranch Road	59.3	RW	42	90	194
Canyon Lakes Drive	North of Bollinger Canyon Road	55.1	RW	RW	47	102
Dougherty Road	South of Crow Canyon Road	62.1	RW	RW	138	297
	North of Bollinger Canyon Road	62.2	RW	RW	140	302
	North of Old Ranch Road	63.5	RW	80	171	369
	South of Old Ranch Road	63.7	RW	82	178	383
Crow Canyon Road	West of Bollinger Canyon Road	62.5	RW	68	147	316
	East of Bollinger Canyon Road	62.7	RW	70	151	326
	West of San Ramon Valley Boulevard	65.1	RW	102	220	473
	West of Camino Ramon	66.5	RW	126	272	586
	East of Camino Ramon	66.2	RW	121	260	560
	East of Alcosta Boulevard	65.6	RW	109	236	508
	West of Dougherty Road	63.4	RW	79	170	365
	East of Dougherty Road	65.1	RW	102	220	474
Norris Canyon Road	West of Bollinger Canyon Road	54.6	RW	RW	43	94
	West of San Ramon Valley Boulevard	58.2	RW	RW	76	163
	West of Camino Ramon	58.5	RW	RW	80	172

Table 4.9-6 (Cont.): Existing Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Bishop Drive	West of Sunset Drive	55.9	RW	RW	53	115
	West of Camino Ramon	53.2	RW	RW	RW	76
	East of Camino Ramon	51.6	RW	RW	RW	59
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	61.2	RW	56	120	258
	West of Sunset Drive	68.1	RW	160	345	744
	West of Camino Ramon	66.8	RW	131	282	607
	East of Camino Ramon	66.0	RW	117	252	544
	East of Bishop Ranch East	66.0	RW	116	250	539
	East of Market Place	65.3	RW	104	225	485
	East of Alcosta Boulevard	64.7	RW	96	207	445
	East of Canyon Lakes Drive	63.7	RW	82	176	380
	West of Dougherty Road	63.1	RW	75	162	348
	East of Dougherty Road	62.9	RW	72	156	336
Montevideo Drive	East of San Ramon Valley Boulevard	58.6	RW	RW	81	174
	West of Alcosta Boulevard	52.6	RW	RW	RW	70
Old Ranch Road	East of Alcosta Boulevard	58.5	RW	37	79	170
	West of Dougherty Road	57.4	RW	RW	67	145
RW = Noise contour is located within right-of-way of roadway. Source: Michael Brandman Associates, 2007.						

Onsite Noise Levels

Onsite noise levels represent the location of the proposed project's structures. Existing onsite noise levels were modeled in order to calibrate the noise model to the six field noise measurements that were obtained on or near the project site. Table 4.9-7 shows the modeled noise level, the field noise measurement, and the difference for each noise measurement site, and Exhibit 4.9-3 shows the modeled existing noise contours of the project vicinity. The exhibit also shows the placement of the noise calibration receivers. As shown in the table, the difference between the modeled noise levels and the average field measurement ranged between 0.4 and 1.6 dBA.



Source: SoundPlan Version 6.4.



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Exhibit 4.9-3 Existing Noise Contour Map

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Table 4.9-7: Existing Noise Level Calculations and Model Calibration

Site No.	Site Description	Noise Levels (dBA L _{eq})		
		Modeled	Average Field Measurement	Difference
3	Sunset Drive near The Shops at Bishop Ranch.	65.2	66.1	-0.9
4	Bollinger Canyon Road near Bishop Ranch East.	65.9	64.3	1.6
5	Southwest Bishop Ranch 1 surface parking area near Chevron Park	52.9	51.8	1.1
6	Bishop Ranch 1 water feature	65.4	66.3	-0.9
A	Located approximately 160 feet southeast of the southern Bishop Ranch 3 parking structure and approximately 25 feet from the centerline of Iron Horse Trail in the northeast corner of Parcel 3A.	51.2	52.5	-1.1
B	Located approximately 20 feet from the south side and 75 feet from the east side of the southern Bishop Ranch 3 parking structure, in the northeast corner of Parcel 3A.	55.3	55.7	-0.4

Source: Michael Brandman Associates, 2007.

Sensitive Receptors

Sensitive receptors are land uses that are sensitive to increases in ambient noise levels. Examples of sensitive receptors include hospitals, schools, convalescent facilities, and residential areas. Sensitive receptors in the project vicinity are summarized in Table 4.9-8.

Table 4.9-8: Sensitive Receptors

Sensitive Receptor	Address	Relationship to Project Site
Marriot Residence Inn	1071 Market Place	180 feet east of Parcel 1A
Reflections Condominiums	205 Reflections Drive	210 feet east of Parcel 1A
Iron Horse Middle School	12601 Alcosta Boulevard	2,000 feet northeast of Parcel 3A

Source: Michael Brandman Associates, 2007.

4.9.3 - Regulatory Framework

State

Caltrans

Construction vibration Construction vibration is regulated in accordance with standards established by the Transportation and Construction-Induced Vibration Guidance Manual issued by the California Department of Transportation (Caltrans). The manual recommends a threshold of 0.2 inches per second or 106 VdB (dB re: 1 micro-inch per second) as the significance level for construction activities.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable.” The City of San Ramon’s adopted land use compatibility guidelines are discussed below.

Local**City of San Ramon**

The project site is located in the jurisdiction of the City of San Ramon, which has separate standards for transportation, stationary, and construction noise and vibration sources. The following provides a discussion of the standards for these types of noise and vibration sources.

Transportation-Related Noise

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City has established guidelines for acceptable community noise levels in the General Plan Noise Element. The Noise Element outlines the land use compatibility for community noise exposure by land use category. For development of a site with exterior noise levels less than 65 dBA CNEL, commercial development is normally acceptable, with typically no noise analysis or mitigation required. For development of a site with exterior noise levels in the 65- to 78-dBA CNEL range, commercial development is conditionally acceptable upon further analysis through a noise impact analysis and possible mitigation. For development of a site with exterior noise levels in the 75- to 85-dBA CNEL range, commercial-retail development is normally unacceptable. Exhibit 4.9-4 provides the Land Use Compatibility Matrix that identifies compatibility of land uses with noise levels.

For the residential portion of the proposed project, the General Plan Noise Element provides an interior noise level standard of 45 dBA CNEL or less and no noise standard for the commercial portion of the proposed project. For the surrounding noise-sensitive residential uses, the General Plan Noise Element provides an exterior noise level standard of 60 dBA CNEL or less for the outdoor living areas and an interior noise level standard of 45 dBA CNEL or less. In the context of this noise impact analysis, the noise impacts from transportation-related noise associated with the proposed project are controlled by the City Noise Element.

In community noise assessment, changes in noise levels less than 3 dBA are often identified as “barely perceptible,” while changes of 5 dBA or greater are “readily perceptible.” The range of 1 dBA to 3 dBA may be perceived by people who are very sensitive to noise as a slight change in noise level. It is recognized that an increase in noise level of 3 dBA is considered just perceptible in a community noise environment and an increase of 5 dBA would be readily perceptible. An increase above ambient noise levels between 3 dBA and 5 dBA would result in an adverse, but not significant

Land Use	Exterior Noise Level Ranges (CNEL dBA)						
	55	60	65	70	75	80	
Residential	Green	Green	Blue	Blue	Yellow	Red	
Transient Lodging - Motels, Hotels	Green	Green	Blue	Blue	Yellow	Red	
Schools, Libraries, Churches, Hospitals, Nursing Homes	Green	Green	Blue	Blue	Yellow	Red	
Auditoriums, Concert Halls, Amphitheaters	Blue	Blue	Blue	Blue	Red	Red	
Sports Arenas, Outdoor Spectator Sports	Blue	Blue	Blue	Blue	Red	Red	
Playgrounds, Neighborhood Parks	Green	Green	Green	Green	Yellow	Red	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Green	Green	Green	Green	Yellow	Red	
Office Buildings, Business Commercial and Professional	Green	Green	Blue	Blue	Yellow	Yellow	
Industrial, Manufacturing, Utilities, Agriculture	Green	Green	Green	Green	Blue	Yellow	
Key:	Green	Normally Acceptable; Specified land use is satisfactory			Yellow	Normally Unacceptable; New development should generally be discouraged	
	Blue	Conditionally Acceptable; New development allowed only after detailed analysis			Red	Clearly Unacceptable; New development not allowed	

Source: City of San Ramon General Plan, Figure 10-2.



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Exhibit 4.9-4 City of San Ramon Land Use Compatibility Noise Standards

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impact, while an increase in noise level greater than 5 dBA when the community noise level already exceeds the City's 60-dBA CNEL standard for noise-sensitive land uses would be considered a significant impact.

Stationary Noise and Vibration

The City Code has established exterior noise level performance standards to control stationary source/non-transportation related noise impacts. The performance standards do not provide quantitative noise limits; instead, they provide operating rules, which are presented below from Municipal Code Chapter V Noise Control B6-101, Business and Residential Relationships:

- Store deliveries by any vehicle in the area between the business and residences is prohibited between 10 p.m. and 6:30 a.m. weekdays and between 10 p.m. and 8 a.m. on weekend and federal holidays. Delivery vehicles will have their engines turned off during deliveries.
- Garbage disposal, construction and maintenance by power equipment in the area between the business and residences is prohibited between 10 p.m. and 6:30 a.m. weekdays and between 10 p.m. and 8 a.m. on weekends and federal holidays.
- Pedestrian, cycle or unauthorized vehicle traffic in the area between the business and residences is prohibited between 10 p.m. and 8 a.m.

In addition to the standards shown above, the City's General Plan Noise Element also provides a 45-dBA L_{eq} noise level threshold for the interior living areas of all residences.

Construction Noise and Vibration

To control construction-related noise and vibration, the City has derived standards specifically for construction noise and vibration, because of their short-term nature. The City standards are specified in the General Plan Noise Element and Noise Ordinance.

The City of San Ramon's City Code Chapter V Noise Control, B6-100 requires that construction in residential zoning districts be limited to the hours of 7:30 a.m. and 6:00 p.m. Monday through Friday and holidays, and 9:00 a.m. and 6:00 p.m. on Saturday and Sunday.

Since the City of San Ramon does not have specific vibration impact criteria for construction-related vibration levels, Caltrans' vibration impact thresholds presented in the Transportation- and Construction-Induced Vibration Guidance Manual were utilized.

4.9.4 - Methodology

Michael Brandman Associates prepared a Noise Impact Analysis, dated June 2007, to determine the offsite and onsite noise impacts associated with the proposed project.

Existing Noise Levels

To ascertain the existing noise at and adjacent to the project site, field monitoring was conducted from Monday, June 4, 2007 to Tuesday, June 5, 2007. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on the local roadways and from I-680. No noise impacts from aircraft were observed during the measurements.

Noise monitoring was performed using two different styles of noise meters for the short-term peak hour measurements and the 24-hour measurements, which are described below.

Short-Term Peak Hour Noise Measurements

The short-term peak hour noise measurements were taken using a Larson-Davis Model 824 Type 1 precision sound level meter programmed in “slow” mode to record noise levels in “A” weighted form. The sound level meter and microphone were mounted on a tripod five feet above the ground and were equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 200. The accuracy of the calibrator is maintained through a program established through the manufacturer and is traceable to the National Bureau of Standards. The unit meets the requirements of ANSI Standard S1.4-1984 and IEC Standard 942: 1988 for Class 1 equipment. All noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

All noise measurement durations were measured according to the standards stated in Section N-3320 of Caltrans Technical Noise Supplement, which specifies that the measurements be a duration of at least 10 minutes and shall be continued past 10 minutes until the fluctuations in the displayed L_{eq} are less than 0.5 dBA.

24-Hour Noise Measurements

The 24-hour noise measurements were taken using an Extech Model 407780 Type 2 integrating sound level meter programmed in “slow” mode to record the sound pressure level at 5-second intervals for 24 hours in “A” weighted form. In addition, the L_{eq} averaged over the entire measuring time was also recorded. The sound level meter and microphone were mounted on a tripod five feet above grade and was equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using an Extech calibrator, Model 407766. All noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

Onsite Noise Levels

In order to provide a more detailed noise analysis of the project vicinity, calculations of the expected future exterior noise levels were made using SoundPlan Version 6.4 noise modeling software. The following section describes the noise analysis methodologies, which includes a discussion of the software and modeling input parameters used in this analysis.

SoundPlan Noise Modeling Software

Because of the project site's proximity to I-680, which is a significant source of traffic noise, and since the project vicinity is impacted by multiple roadways and existing and proposed parking lots, the SoundPlan Version 6.4 noise modeling software was used. SoundPlan's road noise algorithms are based on the FHWA Traffic Noise Model (FHWA TNM Model) and SoundPlan's parking lot noise algorithms are based on the international standard ISO 9613-2, since no national standard for parking lot noise currently exists. The SoundPlan Model requires the input of roadways, parking lots, and the locations of the noise measurement receivers. In addition, sound barriers, terrain contour lines, building placement, and specific ground coverage zones may be incorporated as well. The site plan along with scaled aerial photographs, were used to determine the placement of the roadways, parking lots, structures, and key contour lines to establish the terrain in project vicinity. Except for the roadways and buildings that were analyzed as "hard" site conditions, the remainder of the area was analyzed as "soft" site conditions. The default temperature and humidity were used in the analysis. The SoundPlan Model printouts are provided in Appendix G and the following describes the roadway, parking lot, and receiver assumptions used.

Roadway Assumptions

The model analyzed the noise impacts from I-680, Sunset Drive, West Street (proposed), Camino Ramon, East Street (proposed), Bishop Ranch East, Bishop Drive (includes extension), Bollinger Canyon Road, and the road into the City Hall parking structure. Each direction of travel for I-680, Bollinger Canyon Road, and Camino Ramon south of Bollinger Canyon Road was analyzed separately, while the remaining roadways were analyzed based on a single-lane equivalency. The CNEL noise levels were calculated for the existing condition, Year 2020 baseline (without project), and Year 2020 with project scenarios. The average daily traffic volumes were obtained from the Traffic Operations Evaluation, except for West Street (proposed), East Street (proposed), and the road into City Hall parking structure, which were not analyzed by the Traffic Operations Evaluation and were assumed to have average daily traffic volumes of 2,000 vehicles for the Year 2020 with project scenario.

The model requires the separate input of autos, medium trucks, and heavy trucks. For the local roadways, the vehicle mix was based on the roadway's General Plan classification vehicle mix shown. The collector vehicle mix was used for those roadways that do not have a General Plan classification. For I-680, the vehicle mix was obtained from the 2005 Annual Average Daily Truck Traffic on the California Highway System, prepared by State of California Department of Transportation, November 2006, and is shown below in Table 4.9-9. The roadway speeds were based on the posted speed limits.

Table 4.9-9: Interstate 680 Vehicle Mix

Vehicle Type	Percent of Vehicle Mix			Overall
	Day (7 a.m. - 7p.m.)	Evening (7 p.m. - 10 p.m.)	Night (10 p.m. - 7 a.m.)	
Automobiles	65.6	13.4	15.7	94.7
Medium trucks	1.8	0.3	0.5	2.5
Heavy trucks	1.7	0.1	1.0	2.8

Source: California Department of Transportation, November 2006.

Transit Assumptions

The proposed project includes a transit center with four bus stalls that would be located on the ground floor of the parking structure adjacent to City Hall. According to the Traffic Operations Evaluation, there are currently seven bus routes serving the project site, which average approximately one stop per hour per route near the project site. It was assumed that each of these routes would add a stop at the transit center and that an additional route would serve the area in the future. Therefore, the analysis was based on the transit center, which would be utilized by 8 buses per hour. The bus volumes were added to the Bishop Ranch 1 entrance road.

Parking Lot Assumptions

The SoundPlan model—which requires input of the placement of the parking lots, the number of parking spaces in each lot, and the average number of car movements per hour that occur per space—also analyzed the noise impacts from the existing and proposed parking lots. Twenty-four-hour noise measurements were taken of the parking lot noise from the Bishop Ranch 3 southern parking structure. The noise measurements found that, at 20 feet from the Bishop Ranch 3 southern parking structure, the noise level was 55.7 dBA L_{eq} or 59.4 dBA CNEL. It was assumed that the Bishop Ranch 3 southern parking structure has 1,200 parking spaces. The noise level for each proposed parking structure was based on the noise level proportional to the number of parking spaces provided in each parking structure.

Water Feature Assumptions

The SoundPlan model also analyzed the noise impacts from the existing and proposed water features in the project study area. Noise measurements of the existing water feature in Bishop Ranch 1A were obtained. The noise measurements found that, at 20 feet from the water feature, the noise level was 66.3 dBA L_{eq} . The water features were analyzed as area noise sources, and the noise levels for the proposed water features were based on the measured water-feature noise level proportional to the area of the water feature.

Receiver Assumptions

Receivers were placed at the field noise measurements locations; in the offsite structures with noise sensitive uses; and onsite, where residential uses are proposed. The receivers were placed either 5 feet above ground level or 5 feet above floor level for the residential structure receivers.

4.9.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether noise impacts are significant environmental effects, the following questions are analyzed and evaluated: Would the project result in:

- a.) Exposure of 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?
- b.) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c.) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d.) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e.) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Refer to Section 7, Effects Found Not To Be Significant.)
- f.) 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? (Refer to Section 7, Effects Found Not To Be Significant.)

4.9.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Construction Noise

Impact NOI-1: **The proposed project would generate substantial construction noise that may adversely impact nearby noise-sensitive land uses.**

Impact Analysis

Construction noise and vibration represent a short-term increase in ambient noise levels. Noise impacts from construction activities associated with the proposed project would be functions of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

The construction activities for the proposed project are anticipated to include demolition of 194,652 square feet of office space spread among four, two-story office structures; ground clearing, excavation, and grading of approximately 44 acres of land; and construction of more than 2.1 million square feet of mixed uses. The following describes the anticipated construction schedule:

Plaza District:

- Construction starts in fall 2008 and ends with construction completion and opening in November 2010.

Bishop Ranch 1A

- The first Bishop Ranch 1A office building starts in mid-2008 with a construction period of 14 months.
- Bishop Ranch 1A parking structure starts in mid-2008 with a construction period of 10 months.
- The second office building starts mid-2009 with a construction period of 14 months.
- Bishop Ranch 1 parking structure starts in mid-2009 with a construction period of 10 months.
- The third office building starts in mid-2010 with a construction period of 14 months.

City Hall and Transit Center

- Construction begins mid-2009 with a construction period of 18 months.

Short-term noise impacts could occur during construction activities either from the noise impacts created from the noise generated onsite during demolition, ground clearing, excavation, grading, and construction activities, or from the transport of workers and movement of construction materials to and from the project site. Onsite and offsite construction noise are discussed separately.

Onsite Construction Noise

Onsite construction noise is of the greatest concern as it relates to nearby noise-sensitive land uses. The nearest noise-sensitive land uses include a Marriott Residence Inn, located approximately 180 feet east of the nearest construction activity on Parcel 1A, and the Reflections Condominiums, located approximately 210 feet east of the nearest construction activity on Parcel 1A. In addition, the nearest Iron Horse Middle School classrooms are approximately 2,000 feet from the northeast corner of Parcel 3A. Commercial and office developments and parks are not considered noise-sensitive land uses.

The Marriott Residence Inn would experience the greatest noise impact during the construction of the three Bishop Ranch 1A office buildings, which would be phased in between mid-2008 and 2011. The Reflections Condominiums would experience the greatest noise impact during the construction of the Bishop Ranch 1 parking structure, which is anticipated to start in mid-2009 and last for 10 months. Iron Horse Middle School would experience the greatest noise impacts during the construction of

Block F of the Plaza District, which is anticipated to start in the fall of 2008 and be completed by November 2010.

Construction noise impacts onto the nearby sensitive receptors have been calculated according to the methodology discussed previously and through the use of the Roadway Construction Noise Model. Pile drivers may be used during the construction of Bishop Ranch 1A office buildings, the Bishop Ranch 1 parking structure, and Block F of the Plaza District, which would be the noisiest phase of construction. Along with the operation of a pile driver, it was assumed that the simultaneous operation of an excavator and a front-end loader would occur. The individual noise levels of the various types of equipment have been previously shown above in Table 4.9-1. The results of the construction noise impacts are shown below in Table 4.9-10. The Roadway Construction Noise Model printouts are provided in Appendix G.

Table 4.9-10: Construction Noise Impacts

Land Use	Distance to Nearest Construction Noise Source	Combined Equipment Noise Level	
		dBA L _{max}	dBA L _{eq}
Marriot Residence Inn	180	90.1	83.3
Reflections Condominiums	210	88.8	81.9
Iron Horse Middle School	2,000	69.2	62.4

Source: FHWA Roadway Construction Noise Model Version 1.0.

Table 4.9-10 shows that the Marriot Residence Inn, located approximately 180 feet east of the nearest construction noise source will experience the greatest construction noise impact from the proposed project with combined maximum average noise levels from construction equipment of 83.3 dBA L_{eq}.

Since construction noise is of a temporary nature, it is exempt from compliance with the City’s land use compatibility guidelines shown in Exhibit 4.9-4. However, the City Code does require construction-related operational considerations such as limitation on the hours of construction and proper maintenance of sound attenuation devices on construction equipment. These requirements are incorporated into the project as mitigation. The implementation of the construction noise control mitigation measures would reduce potential impacts to a level of less than significant.

Offsite Construction Noise

The transport of workers and movement of construction materials could incrementally increase the noise levels along nearby roadways. In order for offsite roadway noise impacts created by construction trips associated with the proposed project to be considered significant, the offsite roadway noise levels would have to increase by 5 dBA CNEL, and the resulting noise level would have to exceed the City’s 60 dBA CNEL exterior noise standard for noise-sensitive uses. The greatest construction-related offsite noise impact is expected to occur when the existing 194,652 square feet of the Bishop Ranch 2 office complex is demolished and the debris is hauled offsite.

According to the URBEMIS2002 Model default settings for air quality analysis, this would require haul trucks to make approximately 45 round-trips per day for 20 days.

As discussed in Section 4.12, Transportation, mitigation is proposed that would limit construction traffic to the streets along the project site frontage. Truck traffic would not be permitted east of the Bollinger Canyon Road and Bishop Ranch East intersection or north of the Camino Ramon intersection with Bishop Drive. With this limitation, no offsite noise-sensitive land uses would be impacted by the construction-related traffic. Therefore, no significant impact is anticipated from construction noise impacts that would occur off the project site.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-1 All construction activities shall adhere to the following requirements:

- All construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from either the Residence Inn or the Reflections Condominiums, unless safety or technical feasibility takes precedence.
- Stationary combustion equipment such as pumps or generators operating within 500 feet of the Residence Inn or the Reflections Condominiums shall be shielded from these noise-sensitive land uses with a noise protection barrier.

Level of Significance After Mitigation

Less than significant impact.

Vibration

Impact NOI-2: Operational vibration associated with the proposed project may subject project residents to substantial vibration.

Impact Analysis

This impact assesses the proposed project’s potential to expose persons and structures to substantial vibration from construction and operational activities. Because the City of San Ramon does not have any adopted vibration exposure threshold criteria, the thresholds presented in the Caltrans’ Transportation- and Construction-Induced Vibration Guidance Manual were used in this analysis.

Construction Vibration

Construction activities can produce vibration that may be felt by adjacent uses. The primary sources of vibration during construction will potentially be from pile drivers, which are known to generate substantial vibration levels. As shown previously in Table 4.9-3, an impact pile driver truck generates the most amount of vibration of any piece of construction equipment with an upper range of 1.518 PPV or 112 VdB at 25 feet.

The nearest sensitive receptor to pile driving activities would be the Marriott Residence Inn, located approximately 180 feet east of the Bishop Ranch 1A construction footprint. It is anticipated that the vibration levels created at the Residence Inn caused by an impact pile driver operating on the eastern portion of the Bishop Ranch 1A site would be around 95 VdB. This vibration level is below the 106-VdB significance level. Therefore, construction-related vibration from the proposed project would not result in a significant vibration impact. Impacts would be less than significant.

Operational Vibration

The proposed project would result in the operation of a total of more than 2.1 million square feet of mixed uses, including retail, office, hotel, residential, and civic, on the project site. The commercial uses would require the use of delivery trucks that may create vibration. In addition, in Blocks A, D, and E of the Plaza District, proposed parking and residential uses will be present on the same floor levels, which may create vibration impacts to the proposed residential uses. For the purposes of evaluating operational vibration, a threshold of 0.25 inches per second was used as the significance level for ongoing, operation-related impacts, which was obtained from the Caltrans Transportation- and Construction-Induced Vibration Guidance Manual.

The nearest offsite sensitive receptor to the proposed project would be the Residence Inn, located approximately 150 feet east of the northbound lane of the Bishop Ranch 1 East road, which would be the nearest path of travel for delivery trucks. As shown in Table 4.9-3, a large bulldozer, which would be comparable to a tractor-trailer, generates 87 VdB at 25 feet. Since the Residence Inn would be 6 times that distance from the nearest truck path, operational vibration from truck movements on the Bishop Ranch 1 East road would not be expected to be felt by occupants. Therefore, no offsite vibration impacts are anticipated from the operation of delivery trucks.

Detailed architectural plans are not yet available for Blocks A, D, and E of the Plaza District to adequately analyze the potential vibration impacts that may be created by the proposed parking and residential uses on the same floor levels. This vibration may result in a significant impact to the proposed residential units in Block A, D, and E of the Plaza District.

The incorporation of the following mitigation measures would reduce the possibly significant, onsite, long-term vibration impacts to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-2 Upon completion of the architectural plans for Block A, D, and E of the Plaza District and prior to the issuance of a building permit, the applicant shall retain a qualified acoustical consultant to prepare a vibration analysis to assess the potential vibration impacts onto the proposed residential units. If the vibration analysis indicates that residential units would be exposed to vibration greater than 0.25 PPV, the analysis shall provide vibration-attenuation recommendations that shall be incorporated into the project design. The City shall review and approve the vibration analysis.

Level of Significance After Mitigation

Less than significant impact.

Operational Noise - Offsite Impacts

Impact NOI-3: Operational activities associated with the proposed project would not create any substantial offsite noise impacts.

Impact Analysis

The ongoing operation of the proposed project would result in a long-term increase in ambient noise levels. Potential noise impacts associated with the operations of the proposed project are a result of project-generated vehicular traffic on the project vicinity roadways. An analysis of potential offsite noise impacts associated with the ongoing operations of the proposed project follows.

Potential Offsite Vehicular Noise Impacts

The potential offsite noise impacts caused by the increase in vehicular traffic from the ongoing operations of the proposed project to the project study area roadways have been analyzed for the following scenarios:

- **Existing Plus Project:** This scenario refers to the existing traffic noise conditions based on the site's current conditions plus the additional noise generated by the project. Note that the existing noise conditions presented previously constitute the without project scenario.
- **Year 2020 Without Project:** This scenario refers to the future traffic noise conditions based on the assumed regional growth shown in the Contra Costa Transportation Authority Countywide Travel Demand Model.
- **Year 2020 With Project:** This scenario refers to the Year 2020 baseline (without project) condition with the addition of traffic from the proposed condition.

In order to quantify the traffic noise impacts along the analyzed roadways, the roadway noise contours were calculated. Noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway. For analysis comparison purposes, the L_{dn} and CNEL noise levels are calculated at 100 feet from the centerline. In addition, the distance from the

centerline to the 55-, 60-, 65-, and 70-dBA noise levels are calculated for both L_{dn} and CNEL standards.

Existing Plus Project Conditions

The calculated existing plus project noise contours are shown below in Table 4.9-11. The table shows that, at 100 feet compared to the existing conditions, Bollinger Canyon Road south of Norris Canyon Road, Sunset Drive south of Bishop Drive, Camino Ramon from north of Norris Canyon Road to north of Bishop Drive, and Alcosta Boulevard south of Montevideo Drive are the additional roadway segments that would exceed the City’s 60 dBA CNEL standard. The noise levels from all analyzed roadway segments would range from 54.0 to 69.0 dBA CNEL.

Table 4.9-11: Existing Plus Project Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	56.5	RW	RW	58	125
	North of Norris Canyon Road	57.7	RW	RW	71	152
	South of Norris Canyon Road	60.1	RW	47	102	220
San Ramon Valley Boulevard	North of Crow Canyon Road	61.9	RW	62	134	289
	North of Norris Canyon Road	59.8	RW	45	97	210
	North of Bollinger Canyon Road	61.6	RW	59	127	274
	South of Bollinger Canyon Road	63.9	39	85	183	393
	South of Montevideo Drive	62.5	RW	68	146	314
Sunset Drive	South of Bishop Drive	60.2	RW	48	104	224
	North of Bollinger Canyon Road	61.7	RW	60	130	281
Camino Ramon	North of Crow Canyon Road	58.1	RW	RW	74	160
	North of Norris Canyon Road	61.1	RW	55	118	255
	North of Executive Parkway	61.0	RW	55	117	253
	North of Bishop Drive	61.1	RW	55	118	254
	North of Bollinger Canyon Road	59.4	RW	43	92	198
	South of Bollinger Canyon Road	58.6	RW	RW	80	173
Bishop Ranch 1 East	South of Bollinger Canyon Road	54.0	RW	RW	RW	85
Market Place	South of Bollinger Canyon Road	57.3	RW	RW	66	142

Table 4.9-11 (Cont.): Existing Plus Project Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Alcosta Boulevard	North of Norris Canyon Road	62.1	RW	64	138	296
	North of Bollinger Canyon Road	62.5	RW	68	146	315
	South of Bollinger Canyon Road	63.4	36	78	168	362
	South of Montevideo Drive	60.7	RW	52	111	240
	North of Old Ranch Road	60.0	RW	46	100	215
	South of Old Ranch Road	59.8	RW	45	96	208
Canyon Lakes Drive	North of Bollinger Canyon Road	55.5	RW	RW	50	108
Dougherty Road	South of Crow Canyon Road	62.2	RW	RW	141	304
	North of Bollinger Canyon Road	62.4	RW	RW	143	309
	North of Old Ranch Road	63.6	RW	80	173	374
	South of Old Ranch Road	63.8	RW	84	180	388
Crow Canyon Road	West of Bollinger Canyon Road	63.0	RW	74	159	343
	East of Bollinger Canyon Road	63.0	RW	73	158	341
	West of San Ramon Valley Boulevard	65.3	RW	104	225	485
	West of Camino Ramon	66.8	RW	133	286	615
	East of Camino Ramon	66.5	RW	125	270	581
	East of Alcosta Boulevard	65.9	RW	115	249	536
	West of Dougherty Road	63.8	RW	83	179	385
	East of Dougherty Road	65.3	RW	105	225	486
Norris Canyon Road	West of Bollinger Canyon Road	55.0	RW	RW	47	101
	West of San Ramon Valley Boulevard	58.5	RW	RW	79	170
	West of Camino Ramon	58.7	RW	RW	82	176
Bishop Drive	West of Sunset Drive	56.0	RW	RW	55	117
	West of Camino Ramon	58.2	RW	RW	75	163
	East of Camino Ramon	59.0	RW	RW	86	185
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	61.5	RW	59	126	272
	West of Sunset Drive	69.0	85	184	396	854

Table 4.9-11 (Cont.): Existing Plus Project Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
<i>cont.</i>	West of Camino Ramon	67.6	RW	148	320	689
	East of Camino Ramon	66.5	RW	126	272	587
	East of Bishop Ranch East	67.2	RW	141	304	655
	East of Market Place	66.7	RW	130	279	602
	East of Alcosta Boulevard	65.6	RW	110	237	511
	East of Canyon Lakes Drive	64.7	RW	96	206	444
	West of Dougherty Road	64.1	RW	88	189	407
	East of Dougherty Road	63.7	RW	82	178	383
Montevideo Drive	East of San Ramon Valley Boulevard	58.7	RW	RW	82	176
	West of Alcosta Boulevard	54.2	RW	RW	41	89
Old Ranch Road	East of Alcosta Boulevard	58.9	RW	39	85	182
	West of Dougherty Road	58.0	RW	RW	74	159

RW = Noise contour is located within right-of-way of roadway.
Source: Michael Brandman Associates, 2007.

The proposed project’s potential offsite noise impacts have been calculated by comparing the existing without project scenario with the existing with project scenario. The results of this comparison shown in Table 4.9-12 indicate that the noise level contributions from the proposed project to the study area roadways would range from -0.5 to 7.4 dBA CNEL. The greatest increase of 7.4 dBA CNEL would be anticipated to occur on Bishop Drive east of Camino Ramon. Although the proposed project would have the potential to result in a large increase in traffic-related noise on Bishop Drive east of Camino Ramon, the resulting with project noise level at 100 feet is expected to be 59.0 dBA CNEL, less than the City’s threshold of 60 dBA CNEL. Therefore, for the existing conditions and based on thresholds of significance defined above, no significant, long-term offsite noise impacts from project-related vehicle noise would occur along the study area roadway segments.

Table 4.9-12: Existing Plus Project Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	55.6	56.5	0.9	No
	North of Norris Canyon Road	57.1	57.7	0.6	No

Table 4.9-12 (Cont.): Existing Plus Project Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
<i>cont.</i>	South of Norris Canyon Road	59.6	60.1	0.5	No
San Ramon Valley Boulevard	North of Crow Canyon Road	61.8	61.9	0.1	No
	North of Norris Canyon Road	59.7	59.8	0.1	No
	North of Bollinger Canyon Road	61.4	61.6	0.2	No
	South of Bollinger Canyon Road	63.8	63.9	0.1	No
	South of Montevideo Drive	62.4	62.5	0.1	No
Sunset Drive	South of Bishop Drive	57.8	60.2	2.4	No
	North of Bollinger Canyon Road	60.0	61.7	1.7	No
Camino Ramon	North of Crow Canyon Road	58.0	58.1	0.1	No
	North of Norris Canyon Road	59.9	61.1	1.2	No
	North of Executive Parkway	59.7	61.0	1.3	No
	North of Bishop Drive	59.7	61.1	1.4	No
	North of Bollinger Canyon Road	59.9	59.4	-0.5	No
	South of Bollinger Canyon Road	54.3	58.6	4.3	No
Bishop Ranch East	South of Bollinger Canyon Road	48.5	54.0	5.5	No
Market Place	South of Bollinger Canyon Road	57.0	57.3	0.3	No
Alcosta Boulevard	North of Norris Canyon Road	61.9	62.1	0.2	No
	North of Bollinger Canyon Road	62.3	62.5	0.2	No
	South of Bollinger Canyon Road	62.6	63.4	0.8	No
	South of Montevideo Drive	60.0	60.7	0.7	No
	North of Old Ranch Road	59.2	60.0	0.8	No
	South of Old Ranch Road	59.3	59.8	0.5	No
Canyon Lakes Drive	North of Bollinger Canyon Road	55.1	55.5	0.4	No

Table 4.9-12 (Cont.): Existing Plus Project Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
Dougherty Road	South of Crow Canyon Road	62.1	62.2	0.1	No
	North of Bollinger Canyon Road	62.2	62.4	0.2	No
	North of Old Ranch Road	63.5	63.6	0.1	No
	South of Old Ranch Road	63.7	63.8	0.1	No
Crow Canyon Road	West of Bollinger Canyon Road	62.5	63.0	0.5	No
	East of Bollinger Canyon Road	62.7	63.0	0.3	No
	West of San Ramon Valley Boulevard	65.1	65.3	0.2	No
	West of Camino Ramon	66.5	66.8	0.3	No
	East of Camino Ramon	66.2	66.5	0.3	No
	East of Alcosta Boulevard	65.6	65.9	0.3	No
	West of Dougherty Road	63.4	63.8	0.4	No
	East of Dougherty Road	65.1	65.3	0.2	No
Norris Canyon Road	West of Bollinger Canyon Road	54.6	55.0	0.4	No
	West of San Ramon Valley Boulevard	58.2	58.5	0.3	No
	West of Camino Ramon	58.5	58.7	0.2	No
Bishop Drive	West of Sunset Drive	55.9	56.0	0.1	No
	West of Camino Ramon	53.2	58.2	5.0	No
	East of Camino Ramon	51.6	59.0	7.4	No
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	61.2	61.5	0.3	No
	West of Sunset Drive	68.1	69.0	0.9	No
	West of Camino Ramon	66.8	67.6	0.8	No
	East of Camino Ramon	66.0	66.5	0.5	No
	East of Bishop Ranch East	66.0	67.2	1.2	No
	East of Market Place	65.3	66.7	1.4	No
	East of Alcosta Boulevard	64.7	65.6	0.9	No

Table 4.9-12 (Cont.): Existing Plus Project Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
<i>cont.</i>	East of Canyon Lakes Drive	63.7	64.7	1.0	No
	West of Dougherty Road	63.1	64.1	1.0	No
	East of Dougherty Road	62.9	63.7	0.8	No
Montevideo Drive	East of San Ramon Valley Boulevard	58.6	58.7	0.1	No
	West of Alcosta Boulevard	52.6	54.2	1.6	No
Old Ranch Road	East of Alcosta Boulevard	58.5	58.9	0.4	No
	West of Dougherty Road	57.4	58.0	0.6	No
Source: Michael Brandman Associates, 2007.					

The table above also shows that through development of the proposed project the noise would be reduced slightly for the segment of Camino Ramon north of Bollinger Canyon Road. This would be due to the removal of the Bishop Ranch 2 office complex, which would change the land use and result in a different traffic pattern.

Year 2020 Conditions

The calculated year 2020 baseline (without project) noise contours are shown below in Table 4.9-13. The calculated noise measurements in the table show that at 100 feet, compared with existing conditions, Bollinger Canyon Road south of Norris Canyon Road, San Ramon Valley Boulevard north of Norris Canyon Road, Sunset Drive south of Bishop Drive, Camino Ramon from north of Norris Canyon Road to north of Bishop Drive, and Alcosta Boulevard south of Montevideo Drive to south of Old Ranch Road, are the additional roadway segments that would exceed the City's 60 dBA CNEL standard. The noise levels from all analyzed roadway segments would range from 49.1 to 68.7 dBA CNEL.

Table 4.9-13: Year 2020 Without Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	56.7	RW	RW	60	129
	North of Norris Canyon Road	58.0	RW	34	74	159
	South of Norris Canyon Road	60.5	RW	50	108	233
San Ramon Valley Boulevard	North of Crow Canyon Road	62.5	RW	68	146	315
	North of Norris Canyon Road	60.5	RW	50	108	233

Table 4.9-13 (Cont.): Year 2020 Without Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
<i>cont.</i>	North of Bollinger Canyon Road	62.2	RW	65	140	302
	South of Bollinger Canyon Road	64.3	42	90	194	419
	South of Montevideo Drive	63.5	37	79	171	368
Sunset Drive	South of Bishop Drive	59.0	RW	40	86	186
	North of Bollinger Canyon Road	61.1	RW	55	119	257
Camino Ramon	North of Crow Canyon Road	58.9	RW	RW	84	181
	North of Norris Canyon Road	60.8	RW	52	112	242
	North of Executive Parkway	60.5	RW	50	108	234
	North of Bishop Drive	60.5	RW	50	108	233
	North of Bollinger Canyon Road	58.2	RW	RW	76	163
	South of Bollinger Canyon Road	54.7	RW	RW	44	96
Bishop Ranch East	South of Bollinger Canyon Road	49.1	RW	RW	RW	40
Market Place	South of Bollinger Canyon Road	57.6	RW	RW	70	150
Alcosta Boulevard	North of Norris Canyon Road	62.7	RW	70	151	326
	North of Bollinger Canyon Road	63.1	RW	75	162	349
	South of Bollinger Canyon Road	63.4	36	78	169	364
	South of Montevideo Drive	60.8	RW	53	114	245
	North of Old Ranch Road	60.0	RW	46	100	215
	South of Old Ranch Road	60.2	RW	48	102	221
Canyon Lakes Drive	North of Bollinger Canyon Road	55.8	RW	RW	53	113
Dougherty Road	South of Crow Canyon Road	63.0	RW	73	158	340
	North of Bollinger Canyon Road	65.6	RW	109	234	505
	North of Old Ranch Road	64.4	RW	92	197	425
	South of Old Ranch Road	64.7	RW	95	204	440
Crow Canyon Road	West of Bollinger Canyon Road	64.1	41	88	189	407
	East of Bollinger Canyon Road	64.3	RW	90	195	420
	West of San Ramon Valley Boulevard	65.8	RW	112	242	522
	West of Camino Ramon	67.3	RW	143	309	665
	East of Camino Ramon	67.1	RW	137	295	636

Table 4.9-13 (Cont.): Year 2020 Without Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
<i>cont.</i>	East of Alcosta Boulevard	66.4	RW	125	268	578
	West of Dougherty Road	64.3	RW	89	193	415
	East of Dougherty Road	66.0	RW	116	250	539
Norris Canyon Road	West of Bollinger Canyon Road	55.3	RW	RW	48	104
	West of San Ramon Valley Boulevard	59.0	RW	RW	86	185
	West of Camino Ramon	59.4	RW	42	91	195
Bishop Drive	West of Sunset Drive	56.2	RW	RW	56	121
	West of Camino Ramon	55.3	RW	RW	48	104
	East of Camino Ramon	56.3	RW	RW	56	122
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	61.8	RW	61	131	283
	West of Sunset Drive	68.7	82	176	378	815
	West of Camino Ramon	67.2	RW	141	303	652
	East of Camino Ramon	66.2	RW	120	259	559
	East of Bishop Ranch East	66.9	RW	134	289	622
	East of Market Place	66.2	RW	120	258	556
	East of Alcosta Boulevard	65.8	RW	114	245	528
	East of Canyon Lakes Drive	64.6	RW	94	202	436
	West of Dougherty Road	64.5	RW	93	200	431
Montevideo Drive	East of San Ramon Valley Boulevard	59.9	RW	46	98	211
	West of Alcosta Boulevard	53.5	RW	RW	RW	79
Old Ranch Road	East of Alcosta Boulevard	59.4	RW	42	91	195
	West of Dougherty Road	58.3	RW	36	77	167
RW = Noise contour is located within right-of-way of roadway. Source: Michael Brandman Associates, 2007.						

The calculated Year 2020 with project noise contours are shown below in Table 4.9-14. The calculated noise measurements in the table shows that at 100 feet, compared with year 2020 baseline conditions, no additional roadway segments would exceed the City's 60-dBA CNEL standard. The noise levels from all analyzed roadway segments would range from 53.0 to 69.4 dBA CNEL.

Table 4.9-14: Year 2020 With Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	57.3	RW	RW	66	142
	North of Norris Canyon Road	58.5	RW	37	79	171
	South of Norris Canyon Road	60.9	RW	53	114	247
San Ramon Valley Boulevard	North of Crow Canyon Road	62.6	RW	69	149	321
	North of Norris Canyon Road	60.6	RW	51	110	237
	North of Bollinger Canyon Road	62.4	RW	67	145	312
	South of Bollinger Canyon Road	64.8	45	97	208	449
	South of Montevideo Drive	63.5	37	80	172	371
Sunset Drive	South of Bishop Drive	60.0	RW	47	100	216
	North of Bollinger Canyon Road	61.9	RW	62	134	289
Camino Ramon	North of Crow Canyon Road	58.9	RW	RW	84	181
	North of Norris Canyon Road	61.7	RW	60	130	279
	North of Executive Parkway	61.6	RW	59	127	275
	North of Bishop Drive	61.6	RW	59	128	275
	North of Bollinger Canyon Road	59.8	RW	45	98	210
	South of Bollinger Canyon Road	58.0	RW	RW	74	159
Bishop Ranch East	South of Bollinger Canyon Road	53.0	RW	RW	RW	74
Market Place	South of Bollinger Canyon Road	57.8	RW	RW	72	154
Alcosta Boulevard	North of Norris Canyon Road	62.8	RW	72	155	333
	North of Bollinger Canyon Road	63.3	36	77	165	356
	South of Bollinger Canyon Road	64.1	40	86	186	401
	South of Montevideo Drive	61.4	RW	57	123	266
	North of Old Ranch Road	60.6	RW	51	110	238
	South of Old Ranch Road	60.5	RW	50	108	233
Canyon Lakes Drive	North of Bollinger Canyon Road	56.1	RW	RW	55	118
Dougherty Road	South of Crow Canyon Road	63.1	RW	74	160	345
	North of Bollinger Canyon Road	65.6	RW	110	237	510
	North of Old Ranch Road	64.5	RW	92	199	429
	South of Old Ranch Road	64.7	RW	96	206	445

Table 4.9-14 (Cont.): Year 2020 With Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Crow Canyon Road	West of Bollinger Canyon Road	64.5	43	92	198	427
	East of Bollinger Canyon Road	64.5	RW	93	200	431
	West of San Ramon Valley Boulevard	65.9	RW	115	247	531
	West of Camino Ramon	67.6	RW	148	320	689
	East of Camino Ramon	67.2	RW	141	304	655
	East of Alcosta Boulevard	66.7	RW	130	279	601
	West of Dougherty Road	64.5	RW	93	200	432
	East of Dougherty Road	66.1	RW	118	255	549
Norris Canyon Road	West of Bollinger Canyon Road	55.7	RW	RW	51	111
	West of San Ramon Valley Boulevard	59.2	RW	41	89	191
	West of Camino Ramon	59.5	RW	43	92	199
Bishop Drive	West of Sunset Drive	56.4	RW	RW	57	123
	West of Camino Ramon	58.1	RW	RW	74	160
	East of Camino Ramon	59.3	RW	42	90	193
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	62.3	RW	66	143	308
	West of Sunset Drive	69.4	91	195	421	907
	West of Camino Ramon	68.0	RW	158	341	735
	East of Camino Ramon	66.9	RW	135	290	625
	East of Bishop Ranch East	67.9	RW	155	335	721
	East of Market Place	67.3	RW	142	305	657
	East of Alcosta Boulevard	66.9	RW	134	288	621
	East of Canyon Lakes Drive	65.4	RW	106	228	491
	West of Dougherty Road	65.2	RW	103	223	480
	East of Dougherty Road	65.0	RW	100	216	465
Montevideo Drive	East of San Ramon Valley Boulevard	59.9	RW	46	99	213
	West of Alcosta Boulevard	54.8	RW	RW	45	96

Table 4.9-14 (Cont.): Year 2020 With Project Roadway Noise Contours

Roadway	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Old Ranch Road	East of Alcosta Boulevard	59.7	RW	44	95	205
	West of Dougherty Road	58.8	RW	38	83	179
Notes: RW = Noise contour is located within right-of-way of roadway. Source: Michael Brandman Associates, 2007.						

The proposed project’s potential offsite noise impacts have been calculated by comparing the Year 2020 without project scenario with the Year 2020 with project scenario. The results of this comparison shown in Table 4.9-15 indicate that the noise level contributions from the proposed project to the study area roadways would range from 0.0 to 3.9 dBA CNEL. The greatest increase of 3.9 dBA CNEL would be anticipated to occur on Bishop Ranch East south of Bollinger Canyon Road. Although the proposed project will have the potential to result in a large increase in traffic-related noise on Bishop Ranch East south of Bollinger Canyon Road, the with project noise level at 100 feet is expected to be 53.0 CNEL, which is less than the City’s threshold of 60 dBA CNEL. Therefore, no significant long-term offsite noise impacts from project-related vehicle noise would occur along the study area roadways segments under Year 2020 conditions.

Table 4.9-15: Year 2020 Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
Bollinger Canyon Road (North-South)	South of Crow Canyon Road	56.7	57.3	0.6	No
	North of Norris Canyon Road	58.0	58.5	0.5	No
	South of Norris Canyon Road	60.5	60.9	0.4	No
San Ramon Valley Boulevard	North of Crow Canyon Road	62.5	62.6	0.1	No
	North of Norris Canyon Road	60.5	60.6	0.1	No
	North of Bollinger Canyon Road	62.2	62.4	0.2	No
	South of Bollinger Canyon Road	64.3	64.8	0.5	No
	South of Montevideo Drive	63.5	63.5	0.0	No
Sunset Drive	South of Bishop Drive	59.0	60.0	1.0	No
	North of Bollinger Canyon Road	61.1	61.9	0.8	No

Table 4.9-15 (Cont.): Year 2020 Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
Camino Ramon	North of Crow Canyon Road	58.9	58.9	0.0	No
	North of Norris Canyon Road	60.8	61.7	0.9	No
	North of Executive Parkway	60.5	61.6	1.1	No
	North of Bishop Drive	60.5	61.6	1.1	No
	North of Bollinger Canyon Road	58.2	59.8	1.6	No
	South of Bollinger Canyon Road	54.7	58.0	3.3	No
Bishop Ranch East	South of Bollinger Canyon Road	49.1	53.0	3.9	No
Market Place	South of Bollinger Canyon Road	57.6	57.8	0.2	No
Alcosta Boulevard	North of Norris Canyon Road	62.7	62.8	0.1	No
	North of Bollinger Canyon Road	63.1	63.3	0.2	No
	South of Bollinger Canyon Road	63.4	64.1	0.7	No
	South of Montevideo Drive	60.8	61.4	0.6	No
	North of Old Ranch Road	60.0	60.6	0.6	No
	South of Old Ranch Road	60.2	60.5	0.3	No
Canyon Lakes Drive	North of Bollinger Canyon Road	55.8	56.1	0.3	No
Dougherty Road	South of Crow Canyon Road	63.0	63.1	0.1	No
	North of Bollinger Canyon Road	65.6	65.6	0.0	No
	North of Old Ranch Road	64.4	64.5	0.1	No
	South of Old Ranch Road	64.7	64.7	0.0	No
Crow Canyon Road	West of Bollinger Canyon Road	64.1	64.5	0.4	No
	East of Bollinger Canyon Road	64.3	64.5	0.2	No
	West of San Ramon Valley Boulevard	65.8	65.9	0.1	No
	West of Camino Ramon	67.3	67.6	0.3	No
	East of Camino Ramon	67.1	67.2	0.1	No
	East of Alcosta Boulevard	66.4	66.7	0.3	No

Table 4.9-15 (Cont.): Year 2020 Contribution

Roadway	Segment	CNEL at 100 feet			Potential Significant Impact?
		No Project	With Project	Project Contribution	
<i>cont.</i>	West of Dougherty Road	64.3	64.5	0.2	No
	East of Dougherty Road	66.0	66.1	0.1	No
Norris Canyon Road	West of Bollinger Canyon Road	55.3	55.7	0.4	No
	West of San Ramon Valley Boulevard	59.0	59.2	0.2	No
	West of Camino Ramon	59.4	59.5	0.1	No
Bishop Drive	West of Sunset Drive	56.2	56.4	0.2	No
	West of Camino Ramon	55.3	58.1	2.8	No
	East of Camino Ramon	56.3	59.3	3.0	No
Bollinger Canyon Road (East-West)	West of San Ramon Valley Boulevard	61.8	62.3	0.5	No
	West of Sunset Drive	68.7	69.4	0.7	No
	West of Camino Ramon	67.2	68.0	0.8	No
	East of Camino Ramon	66.2	66.9	0.7	No
	East of Bishop Ranch East	66.9	67.9	1.0	No
	East of Market Place	66.2	67.3	1.1	No
	East of Alcosta Boulevard	65.8	66.9	1.1	No
	East of Canyon Lakes Drive	64.6	65.4	0.8	No
	West of Dougherty Road	64.5	65.2	0.7	No
Montevideo Drive	East of San Ramon Valley Boulevard	59.9	59.9	0.0	No
	West of Alcosta Boulevard	53.5	54.8	1.3	No
Old Ranch Road	East of Alcosta Boulevard	59.4	59.7	0.3	No
	West of Dougherty Road	58.3	58.8	0.5	No
Source: Michael Brandman Associates, 2007.					

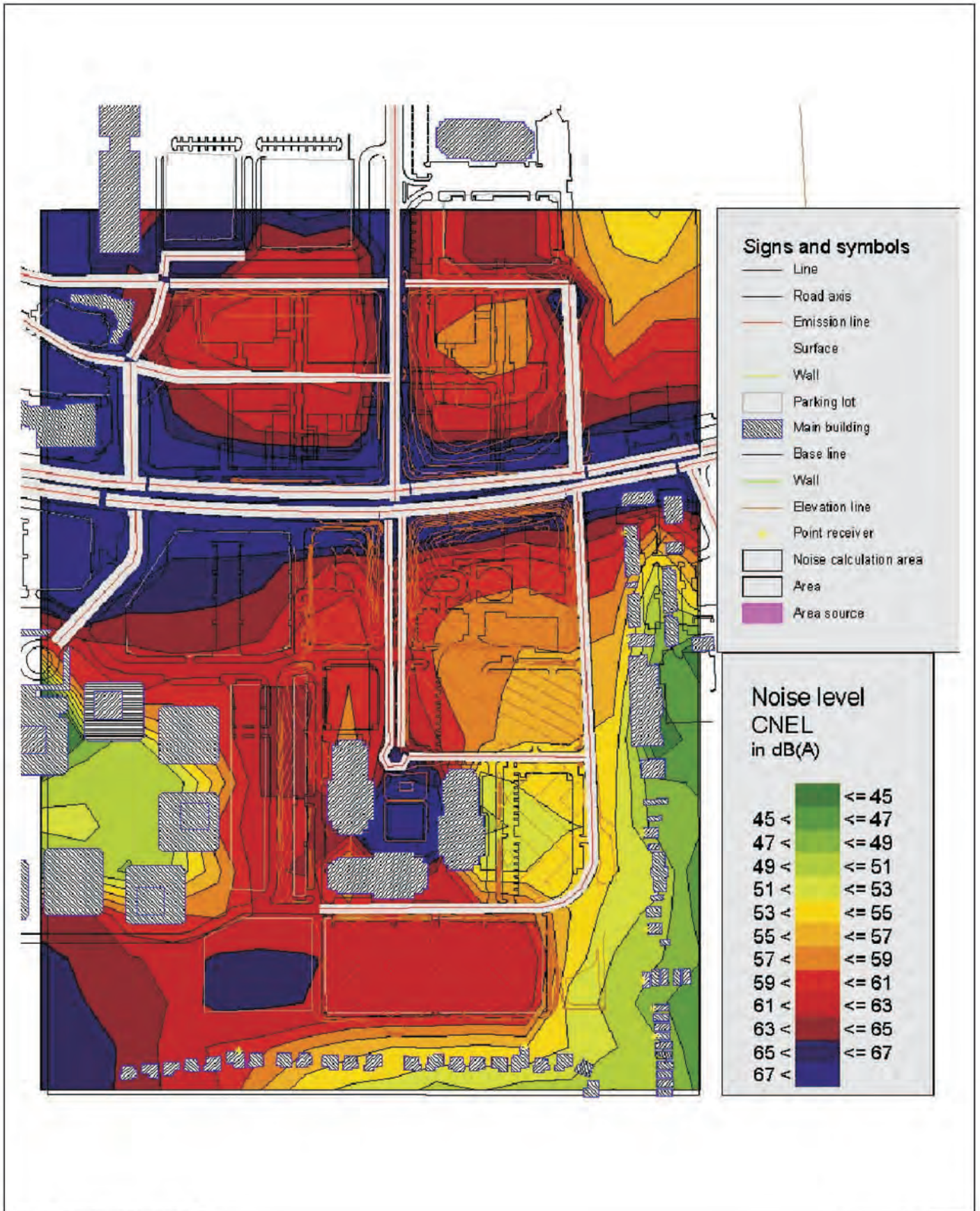
Offsite Receptor Noise Impacts

The year 2020 baseline conditions have been modeled in order to present the anticipated future ambient noise levels without construction of the proposed project. Table 4.9-16 presents the calculated noise levels at the building facades of the nearby residential and school uses to the project site, and Exhibit 4.9-5 shows the calculated noise contours of the project vicinity. The exhibit also shows the placement of the receivers used in the table.

Table 4.9-16: Year 2020 Without Project Noise Levels at Nearby Uses

Site	dBA CNEL	dBA L _{eq} Day	dBA L _{eq} Evening ¹	dBA L _{eq} Night ²
Iron Horse Middle School				
First Floor	44.7	40.8	43.9	47.7
Residence Inn - North				
First Floor	60.9	56.1	58.4	64.3
Second Floor	61.4	56.5	58.9	64.9
Residence Inn - South				
First Floor	54.7	50.0	52.8	58.1
Second Floor	56.1	51.4	54.0	59.5
Reflections Condominiums - North				
First Floor	51.4	47.5	50.4	54.4
Second Floor	52.5	48.4	51.3	55.5
Reflections Condominiums - South				
First Floor	50.1	46.3	49.5	52.9
Second Floor	51.2	47.4	50.5	54.2
Winterside Circle Single-Family Residences - North				
First Floor	49.9	46.1	49.5	52.7
Second Floor	51.0	47.3	50.5	53.9
Winterside Circle Single-Family Residences - Middle				
First Floor	49.0	45.4	48.8	51.7
Second Floor	50.2	46.5	49.9	52.9
Winterside Circle Single-Family Residences - Middle				
First Floor	52.7	48.9	52.6	55.4
Second Floor	53.5	49.7	53.3	56.3
Dunbarton Circle/Ascot Drive Single-Family Residences - East				
First Floor	52.1	48.7	52.4	54.6
Second Floor	53.6	50.2	53.6	56.1
Dunbarton Circle/Ascot Drive Single-Family Residences - West				
First Floor	59.4	55.9	59.3	62.1
Second Floor	59.7	56.2	59.5	62.4
Notes:				
¹ Noise level includes a 4.77-dBA penalty to account for the noise-sensitive evening hours.				
² Noise level includes a 10-dBA penalty to account for the noise-sensitive nighttime hours.				
³ The calculated noise at Iron Horse Middle School is only from noise generated at the project site and does not account for other nearby sources such as Alcosta Boulevard.				
Source: Michael Brandman Associates, 2007.				

The table above shows that, for the Year 2020 baseline condition without construction of the proposed project, only the noise levels at the exterior of the Residence Inn's northern structures will exceed the City's 60-dBA CNEL exterior noise standard.



Source: SoundPlan Version 6.4.



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Exhibit 4.9-5 Year 2020 Without Project Noise Contour Map

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The Year 2020 with project conditions have been modeled in order to present the anticipated future ambient noise levels with the ongoing operations of the proposed project. Table 4.9-17 presents the calculated noise levels at the building facades of the nearby residential and school uses to the project site, and Exhibit 4.9-6 shows the calculated noise contours of the project vicinity.

Table 4.9-17: Year 2020 With Project Noise Levels at Nearby Uses

Site	dBA CNEL	dBA L _{eq} Day	dBA L _{eq} Evening ¹	dBA L _{eq} Night ²
Iron Horse Middle School				
First Floor	43.8	40.0	43.2	46.7
Residence Inn - North				
First Floor	61.7	56.8	59.0	65.2
Second Floor	62.2	57.3	59.6	65.7
Residence Inn - South				
First Floor	57.0	52.5	55.9	60.2
Second Floor	58.2	53.7	57.2	61.4
Reflections Condominiums - North				
First Floor	55.9	52.6	56.1	58.4
Second Floor	56.4	53.0	56.5	59.0
Reflections Condominiums - North				
First Floor	53.5	50.2	53.8	56.0
Second Floor	54.2	50.8	54.3	56.8
Winterside Circle Single-Family Residences - North				
First Floor	52.5	49.1	52.7	55.0
Second Floor	53.2	49.8	53.3	55.8
Winterside Circle Single-Family Residences - Middle				
First Floor	51.0	47.6	51.2	53.5
Second Floor	51.9	48.5	52.0	54.5
Winterside Circle Single-Family Residences - South				
First Floor	53.9	50.2	54.0	56.5
Second Floor	54.5	50.9	54.5	56.8
Dunbarton Circle/Ascot Drive Single-Family Residences - East				
First Floor	53.0	49.7	53.3	55.4
Second Floor	54.3	50.9	54.5	56.8
Dunbarton Circle/Ascot Drive Single-Family Residences - West				
First Floor	59.7	56.2	59.5	62.4
Second Floor	60.0	56.5	59.8	62.7

Table 4.9-17 (Cont.): Year 2020 With Project Noise Levels at Nearby Uses

Site	dBA CNEL	dBA L _{eq} Day	dBA L _{eq} Evening ¹	dBA L _{eq} Night ²
Notes: Noise level includes a 4.77-dBA penalty to account for the noise-sensitive evening hours and a 10-dBA penalty to account for the noise-sensitive nighttime hours. The calculated noise at Iron Horse Middle School is only from noise generated at the project site and does not account for other nearby sources such as Alcosta Boulevard. Source: Michael Brandman Associates, 2007.				

Table 4.9-17 shows that, for the year 2020 with project condition, compared with the year 2020 without project condition, no additional nearby sensitive uses will exceed the City's 60-dBA CNEL exterior noise standard.

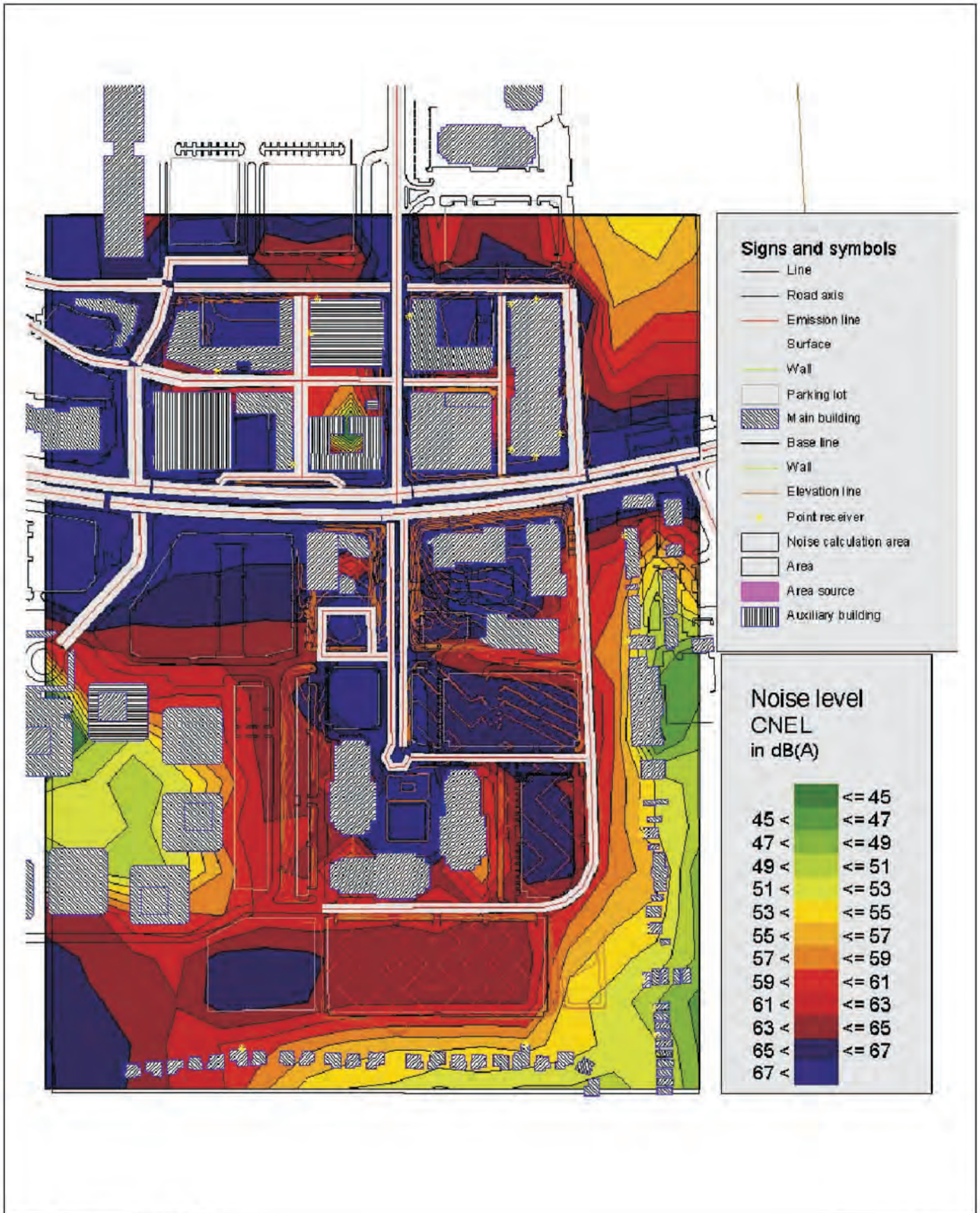
Summary of Impacts to Offsite Receptors

An offsite noise impact would be considered significant if the noise level from onsite sources exceeds an exterior noise level standard of 60 dBA CNEL or an interior noise level standard of 45 dBA CNEL onto any nearby noise-sensitive use.

The noise levels at the backyards of the nearby single-family homes have been calculated for the year 2020 without and with project scenarios. Table 4.9-18 shows a summary of the noise impacts found for these scenarios and the calculated project impacts for each backyard receiver.

Table 4.9-18: Project-Related Offsite Noise Impacts

Site	Year 2020 Without Project	Year 2020 With Project	Project Noise Impacts
Iron Horse Middle School			
First Floor	44.7	43.8	-0.9
Residence Inn - North			
First Floor	60.9	61.7	0.8
Second Floor	61.4	62.2	0.8
Residence Inn - South			
First Floor	54.7	57.0	2.3
Second Floor	56.1	58.2	2.1
Reflections Condominiums - North			
First Floor	51.4	55.9	4.5
Second Floor	52.5	56.4	3.9
Reflections Condominiums - South			
First Floor	50.1	53.5	3.4
Second Floor	51.2	54.2	3.0
Winterside Circle Single-Family Residences - North			
First Floor	49.9	52.5	2.6
Second Floor	51.0	53.2	2.2



Source: SoundPlan Version 6.4.



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Exhibit 4.9-6 Year 2020 With Project Noise Contour Map

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Table 4.9-18 (Cont.): Project-Related Offsite Noise Impacts

Site	Year 2020 Without Project	Year 2020 With Project	Project Noise Impacts
Winterside Circle Single-Family Residences - Middle			
First Floor	49.0	51.0	3.0
Second Floor	50.2	51.9	1.7
Winterside Circle Single-Family Residences - South			
First Floor	52.7	53.9	1.2
Second Floor	53.5	54.5	1.0
Dunbarton Circle/Ascot Drive Single-Family Residences - East			
First Floor	52.1	53.0	0.9
Second Floor	53.6	54.3	0.7
Dunbarton Circle/Ascot Drive Single-Family Residences - West			
First Floor	59.4	59.7	0.3
Second Floor	59.7	60.0	0.3
Notes: Noise level includes a 4.77-dBA penalty to account for the noise-sensitive evening hours and a 10-dBA penalty to account for the noise-sensitive nighttime hours. The calculated noise at Iron Horse Middle School is only from noise generated at the project site and does not account for other nearby sources such as Alcosta Boulevard. Source: Michael Brandman Associates, 2007.			

Table 4.9-18 shows that the noise level at the nearby sensitive receptors would range from -0.9 to 4.5 dBA CNEL. The greatest increase of 4.5 dBA is anticipated to occur at the Reflections Condominiums, which would result in a noise level of 55.9 dBA CNEL. This increase is below the 5.0-dBA threshold of significance, and the resulting noise level is below the City’s 60-dBA exterior noise standard; therefore, no significant noise impacts are anticipated to occur at the Reflections Condominiums.

The northern portion Marriot Residence Inn would experience a 0.8 dBA noise increase, which would result in an exterior noise level of 62.2 at the second floor residences. While exterior noise levels would exceed the City 60 dBA CNEL standard, this is not considered a significant impact. The General Plan EIR noted in particular that exterior noise levels at the location of the Marriot Residence Inn would be in excess of 60 dBA, yet it concluded that after mitigation, impacts would be less than significant. See General Plan EIR, Impacts 4.8-a through 4.8-c and Figure 4.8-2. Further, the 60 dBA standard would be exceeded with or without the proposed project and the 0.8 dBA increase would be less than 1 dBA so the change would not be perceived by even the most sensitive receptors. As a result, this slight increase in exterior noise is not considered a significant impact and was anticipated within the scope of the General Plan EIR.

The analysis shows that the noise level at Iron Horse Middle School will decrease with development of the proposed project. This is due to the noise shielding the Plaza District buildings will provide from I-680 and portions of Bollinger Canyon Road. However, the with project noise level of 43.8

dBA CNEL does not represent a true forecast of the future noise levels at the school because Alcosta Boulevard to the east and Norris Canyon Road to the north were not included in the model. However, the figures in Table 4.9-18 do indicate that the proposed project would not contribute to significant noise impacts at the school.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Operational Noise - Onsite Impacts

Impact NOI-4:	Project occupants may be exposed to noise levels that exceed normally acceptable standards.
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Impact Analysis

Based on the land use compatibility noise levels established in the City of San Ramon General Plan, an onsite noise impact would be considered significant if the onsite noise level exceeds an interior noise level standard of 45 dBA CNEL for the residential uses. Calculations of the expected future interior noise levels were made using the SoundPlan Version 6.4 noise modeling software and the modeling parameters described for the Year 2020 with project scenario in Impact NOI-3.

To assess the interior noise levels related to the compliance with the City’s 45-dBA CNEL interior noise criteria, future CNEL exterior noise levels were calculated at the building façades for the floors on the buildings where residential uses are proposed. To assess the onsite interior noise level impacts, the receivers were placed 5.5 feet above the proposed floor level; a height of 10 feet was assumed for each floor. All receivers were placed along the exterior edge of each unit at the location expected to receive the greatest noise impact.

The expected future exterior noise levels are presented in Table 4.9-19. The table also presents the anticipated interior noise levels for both “windows open” and “windows closed” conditions, which were based on a 12-dBA noise reduction for the “windows open” condition and a 25-dBA noise reduction for the “windows closed” condition—the noise attenuations typically found in mid-rise structures. Based on the FHWA traffic noise prediction model, the exterior noise levels at the building façade will range from 59.9 to 69.0 dBA CNEL. The calculations show that the “windows open” condition would result in interior noise levels that would exceed the City’s 45 dBA CNEL interior standard for all analyzed units. This would be considered a significant impact.

Table 4.9-19: Onsite Residential Noise Levels

Building	Exterior Noise Level at Façade (CNEL)	Interior Noise Levels For:		Required Interior Noise Reduction
		Windows Open	Windows Closed	
South Side of Building A				
Second Floor	59.9	47.9	34.9	14.9
Third Floor	60.8	48.8	35.8	15.8
Fourth Floor	61.6	49.6	36.6	16.6
Fifth Floor	62.9	50.9	37.9	17.9
North Side of Building B				
Second Floor	61.7	49.7	36.7	16.7
Third Floor	62.2	50.2	37.2	17.2
Fourth Floor	62.7	50.7	37.7	17.7
Fifth Floor	62.9	50.9	37.9	17.9
West Side of Building B				
Second Floor	57.6	45.6	32.6	12.6
Third Floor	57.7	45.7	32.7	12.7
Fourth Floor	57.7	45.7	32.7	12.7
Fifth Floor	57.8	45.8	32.8	12.8
East Side of Building D				
Second Floor	66.1	54.1	41.1	21.1
Third Floor	66.2	54.2	41.2	21.2
Fourth Floor	66.3	54.3	41.3	21.3
Fifth Floor	66.4	54.4	41.4	21.4
West Side of Building E				
Second Floor	62.8	50.8	37.8	17.8
Third Floor	63.0	51.0	38.0	18.0
Fourth Floor	63.1	51.1	38.1	18.1
Fifth Floor	63.3	51.3	38.3	18.3
Sixth Floor	63.3	51.3	38.3	18.3
North Side of Building F				
Second Floor	61.3	49.3	36.3	16.3
Third Floor	61.4	49.4	36.4	16.4
Fourth Floor	61.5	49.5	36.5	16.5
Fifth Floor	61.8	49.8	36.8	16.8
Sixth Floor	61.9	49.9	36.9	16.9
Seventh Floor	62.0	50.0	37.0	17.0

Table 4.9-19 (Cont.): Onsite Residential Noise Levels

Building	Exterior Noise Level at Façade (CNEL)	Interior Noise Levels For:		Required Interior Noise Reduction
		Windows Open	Windows Closed	
Eighth Floor	61.9	49.9	36.9	16.9
Ninth Floor	62.5	50.5	37.5	17.5
West Side of Building F				
Second Floor	61.6	49.6	36.6	16.6
Third Floor	61.8	49.8	36.8	16.8
Fourth Floor	61.9	49.9	36.9	16.9
Fifth Floor	62.1	50.1	37.1	17.1
Sixth Floor	62.3	50.3	37.3	17.3
Seventh Floor	62.3	50.3	37.3	17.3
Eighth Floor	62.5	50.5	37.5	17.5
Ninth Floor	63.0	51.0	38.0	18.0
East Side of Building G				
Second Floor	64.8	52.8	39.8	19.8
Third Floor	64.9	52.9	39.9	19.9
Fourth Floor	64.8	52.8	39.8	19.8
Fifth Floor	64.9	52.9	39.9	19.9
Sixth Floor	64.8	52.8	39.8	19.8
Seventh Floor	64.8	52.8	39.8	19.8
Eighth Floor	64.7	52.7	39.7	19.7
Ninth Floor	66.0	54.0	41.0	21.0
South Side of Building G				
Second Floor	68.7	56.7	43.7	23.7
Third Floor	68.8	56.8	43.8	23.8
Fourth Floor	68.8	56.8	43.8	23.8
Fifth Floor	68.9	56.9	43.9	23.9
Sixth Floor	68.9	56.9	43.9	23.9
Seventh Floor	68.9	56.9	43.9	23.9
Eighth Floor	68.9	56.9	43.9	23.9
Ninth Floor	69.0	57.0	44.0	24.0
West Side of Building G				
Second Floor	65.0	53.0	40.0	20.0
Third Floor	65.0	53.0	40.0	20.0

Table 4.9-19 (Cont.): Onsite Residential Noise Levels

Building	Exterior Noise Level at Façade (CNEL)	Interior Noise Levels For:		Required Interior Noise Reduction
		Windows Open	Windows Closed	
Fourth Floor	65.0	53.0	40.0	20.0
Fifth Floor	64.5	52.5	39.5	19.5
Sixth Floor	65.1	53.1	40.1	20.1
Seventh Floor	65.4	53.4	40.4	20.4
Eighth Floor	65.2	53.2	40.2	20.2
Ninth Floor	65.3	53.3	40.3	20.3

Notes:
¹ A minimum of 12-dBA noise reduction is assumed with a windows open condition.
² A minimum of 20-dBA noise reduction is assumed with a windows closed condition.
³ Interior noise reduction is not required when interior noise level with “windows open” condition does not exceed 45 dBA L_{dn} noise standards.
 Source: Michael Brandman Associates, 2007.

As shown in Table 4.9-19, in order to meet the 45-dBA CNEL interior noise standards, an interior noise-level reduction of up to 24.0 dBA CNEL is required. Mitigation is proposed that would require the project applicant to implement noise attenuation measures into the building design to ensure that interior noise levels would be within acceptable standards. With these mitigation measures incorporated as design features into the proposed project, the future interior noise levels will be at or below 44.0 dBA CNEL, which is below the City’s 45-dBA CNEL interior noise level standard. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-4a The project applicant shall provide a “windows closed” condition for all residential units. A windows closed condition requires a means of mechanical ventilation per the Uniform Building Code standards. This shall be achieved with standard air conditioning or a fresh air intake system.

MM NOI-4b The project applicant shall ensure that all air ducts and vents for the residential units shall either (1) incorporate sound baffle ducting or (2) be oriented away from the respective traffic noise source and incorporate at least 6 feet of flexible fiberglass ducting and at least one 90-degree bend.

MM NOI-4c The project applicant shall provide exterior walls with a minimum Sound Transmission Class rating of 46 for all residential units. Typical walls with this rating will have 2x4 studs or greater, 16 inches on-center with R-13 insulation, a

minimum 0.875-inch exterior surface of cement plaster and a minimum interior surface of 0.5-inch gypsum board.

MM NOI-4d The project applicant shall install window and door assemblies in the proposed project's structures that are well fitted and weatherstripped and free of oversize cut outs and openings that unnecessarily increase interior noise exposure.

Level of Significance After Mitigation

Less than significant impact.

4.10 - Population and Housing

4.10.1 - Introduction

This section describes the existing setting regarding population and housing and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on population and housing information provided by the California Department of Finance, the Association of Bay Area Governments, and the City of San Ramon.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on population and housing were less than significant and did not require mitigation. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and scoped out the population and housing topical area and its associated issues during the Initial Study/Notice of Preparation process as effects found not to be significant. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.10.2 - Environmental Setting

Population, Housing, and Employment Estimates

The California Department of Finance estimated the population of the City of San Ramon to be 58,035 as of January 1, 2007. Population and housing characteristics for San Ramon are summarized in Table 4.10-1.

Table 4.10-1: San Ramon Population and Housing Characteristics (2007)

Population	Dwelling Units	Average Household Size (Persons per Household)
58,035	23,116	2.597
Source: California Department of Finance. 2007.		

The California Economic Development Department estimated the labor force in San Ramon to be 28,900 as of March 2007. (Note that the labor force data for the City of San Ramon is not adjusted for seasonal employees.) San Ramon's employment characteristics are summarized in Table 4.10-2.

Table 4.10-2: San Ramon Employment Characteristics (2007)

Category	Figure
Labor force	28,900
Employed persons	28,400
Unemployed persons	500
Unemployment rate (percent)	1.7
Source: California Economic Development Department. 2007.	

Historical Population Growth

The population in San Ramon has grown significantly since incorporation in 1983. The City's population more than doubled during its first two decades of existence. The City's historic population growth between 1985 and 2005 is summarized in Table 4.10-3.

Table 4.10-3: City of San Ramon Historic Population Growth (1985–2005)

Year	Population	Change from Previous (Percent)
1985	24,750	—
1990	35,303	42.6
1995	39,250	11.2
2000	44,722	13.9
2005	50,855	13.7
Source: California Department of Finance. 2007.		

Projected Population Growth

The City of San Ramon and the Association of Bay Area Governments (ABAG) have published population growth projections for San Ramon. San Ramon's projections are contained in its General Plan, which was approved by the City electorate in 2002. ABAG's forecast is contained in Projections 2005, which is a regional population, employment, and housing forecast for the nine-county San Francisco Bay Area. Table 4.10-4 summarizes the projected population growth from both sources in five-year increments.

Table 4.10-4: Projected Population Growth

Year	City of San Ramon General Plan	Change From Previous	Association of Bay Area Governments	Change From Previous
2005	59,349	—	52,000	—
2010	69,673	17.4	58,700	12.90
2015	81,792	17.4	65,000	10.73
2020	96,020	17.4	70,900	9.10

Source: City of San Ramon. 2002; Association of Bay Area Governments. 2005.

Forecasted Employment Growth

Employment in San Ramon has increased since 1980 primarily from the development of new employment opportunities, most notably the Bishop Ranch Business Park. Employment in the City is expected to continue to grow to approximately 60,000 jobs by 2020. Table 4.10-5 summarizes San Ramon’s employment trends in 10-year increments.

Table 4.10-5: Employment Trends

Year	Jobs	Change From Previous (percent)
1980	5,330	—
1990	32,490	510
2000	38,580	19
2010	50,550	31
2020	60,970	21

Source: City of San Ramon. 2004.

Housing

Existing Housing Supply

The California Department of Finance indicates that there were 23,116 dwelling units in San Ramon as of January 1, 2007. San Ramon’s housing supply has increased by 31.7 percent since 2000, when there were 17,552 dwelling units. The bulk of this growth has occurred in the Dougherty Valley, where new residential developments have been completed during the past several years.

Regional Housing Needs Allocation

State law requires local governments to provide housing for persons of all income ranges. The State has prioritized housing production by requiring cities and counties periodically to update the housing element of their General Plan, which is the document that outlines the community’s long-term growth strategy. The amount of housing that must be accounted for in a local housing element is determined through a process called the Regional Housing Needs Allocation (RHNA). In the RHNA process, the State gives each region a number representing the amount of housing needed based on existing need and expected population growth.

In the nine-county San Francisco Bay Area region, ABAG is responsible for assigning each city and county allocation targets for housing by income range. Local governments then revise their housing elements to identify development sites and housing policies that will allow the community to meet its housing needs. ABAG's last RHNA was issued in 1999 and expired at the end of 2006. ABAG is still in the process of drafting an updated RHNA for 2007 and beyond.

The City of San Ramon General Plan Housing Element contains the City's strategy for meeting its housing needs as issued by ABAG. The 1999 RHNA assigned the City of San Ramon a need to develop 4,447 dwelling units. Table 4.10-6 summarizes the City's housing allocation by income. As shown in the table, the largest share of the City's allocation is for moderate and above-moderate incomes. ABAG indicates that the City produced 94.1 percent of its required allocation between 1999 and 2006.

Table 4.10-6: San Ramon Housing Allocation (1999–2006)

Income Category	Dwelling Units	Percent of Total
Very Low	599	13.5
Low	372	8.4
Moderate	984	22.1
Above Moderate	2,492	56.0
Total	4,447	100.0
Dwelling Units Constructed (1999–2006)	4,185	94.1
Source: City of San Ramon. 2004; ABAG. 2007		

4.10.3 - Methodology

Impacts on population and housing were assessed by reviewing existing and anticipated population and housing figures provided by the California Department of Finance, the City of San Ramon General Plan, and ABAG. The proposed project's impacts were evaluated by determining their consistency with these estimates and projections.

4.10.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to population and housing are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) 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)?
- b.) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Refer to Section 7, Effects Found Not To Be Significant.)

- c.) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Refer to Section 7, Effects Found Not To Be Significant.)

4.10.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate. Impacts related to population growth are analyzed below.

Growth Inducement

Impact POP-1: **The proposed project would induce substantial population growth beyond regional population forecasts.**

Impact Analysis

This impact assesses the proposed project's potential to induce substantial population growth. There are two types of population growth: direct and indirect. Direct population growth occurs from the development of new residential units. Indirect population growth occurs from the creation of new employment opportunities or the removal of a barrier to growth (e.g., the extension of urban infrastructure to an undeveloped area).

The proposed project has the potential to induce direct and indirect population growth. The proposed project contains up to 487 residential units and more than 1.5 million square feet of commercial retail, office, and civic uses. Using the City of San Ramon's 2007 average household size of 2.597, the proposed project would add an estimated 1,264 new residents to the City's population. Employment projections provided by Sunset Development indicate that the proposed project commercial uses would generate an estimated 3,636 jobs. Note that the project site is located within an urban area and the proposed project would not require the extension of infrastructure into an undeveloped area.

Direct or indirect population growth is only considered substantial if it exceeds projections contained in local or regional planning documents and population forecasts. In this case, the applicable planning and population forecast documents are the City of San Ramon General Plan and ABAG Projections 2005. Both documents are analyzed separately for proposed project consistency.

City of San Ramon General Plan

The City of San Ramon General Plan anticipates significant growth in San Ramon between 2005 and 2020. The General Plan projects 17.4 percent population increases during each five-year increment, starting from a projected 2005 population of 59,349 and culminating with a projected population of 96,020 in 2020. The California Department of Finance estimated San Ramon's population to be 50,855 in 2005, indicating that actual population growth has occurred at a lower rate than anticipated by the General Plan.

The proposed project is anticipated to open in 2010. The General Plan anticipates that the City's population would be 69,673 persons that year. The proposed project's residential uses would directly add an estimated 1,264 residents to the City's population. The proposed project would create a

variety of employment opportunities ranging from part-time, entry-level opportunities to highly skilled, professional opportunities. A significant percentage of the estimated 3,636 employees would be expected to come from the local workforce; however, some will be expected to relocate to San Ramon. For the purposes of providing a worst-case scenario analysis, it will be assumed that half of 3,636 employees would relocate to San Ramon, adding 1,818 new residents to the City's population. Including both residents and employees, the proposed project would add an estimated 3,082 persons to the City's population. Based on the existing 2007 population estimate of 58,035 and accounting for expected population growth between 2007 and 2010 (3.79 percent annually)¹, the City's estimated population in 2010 without the proposed project would be 64,887. The addition of the 3,082 new residents associated with the proposed project would bring the population to 67,969, which would be within the General Plan's projection of a 2010 population of 69,673 persons. Therefore, the proposed project would not induce growth beyond the General Plan's projections.

ABAG Projections 2005

ABAG projects much lower population growth in San Ramon between 2005 and 2020. ABAG projects five-year growth to range from 12.9 percent between 2005 and 2010, 10.73 percent between 2010 and 2015, and 9.1 percent between 2015 and 2020. ABAG anticipates that San Ramon's 2010 population will be 58,700 and its 2020 population will be 70,900.

As described above, the City of San Ramon's 2010 population without the project is expected to be 64,887 persons, which would exceed ABAG's 2010 projection of 58,700 by 10.5 percent. With the addition of population growth induced by the proposed project, the City's 2010 population is estimated to be 67,969 persons, which would exceed the ABAG projections by 15.8 percent.

While forecasted population growth in San Ramon for 2010 is projected to exceed the ABAG projections without the proposed project, the proposed project would significantly exacerbate this condition by adding an additional 5.3 percent of growth to the exceedance. ABAG population numbers are the basis for other regional plans (e.g., clean air plans, regional housing allocation strategies, etc.), and population growth in excess of the forecast represents a significant growth inducement impact. No mitigation is available to reduce this impact to a level of less than significant; therefore, growth inducement beyond the ABAG regional forecast is a significant unavoidable impact of the proposed project.

Regional Housing Needs Allocation

The proposed project would add 487 housing units to the City's housing supply, including a yet-undetermined number of deed-restricted workforce housing units. These dedicated affordable housing units would contribute to fulfilling the City's RHNA. These units will be credited to the forthcoming RHNA, scheduled to be issued in the second half of 2007.

¹ The annual population growth rate between 2000 and 2007 was 3.79 percent, as calculated from population estimates provided by the California Department of Finance.

In addition, the proposed project's 487 residential units are consistent with the Housing Element's identification of 770 dwelling units in Bishop Ranch at General Plan buildout. The Housing Element outlines the City's strategy for housing production and developing dwelling units in areas identified for residential development demonstrates that the strategy is practical and realistic.

Therefore, the proposed project's residential development would be consistent with local and regional housing strategies.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

No mitigation is available.

Level of Significance After Mitigation

Significant unavoidable impact.

4.11 - Public Services and Recreation

4.11.1 - Introduction

This section describes the existing setting regarding public services and recreation facilities and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are primarily based on information obtained through consultation with public service providers, including the San Ramon Valley Fire Protection District, the San Ramon Police Department, the San Ramon Valley Unified School District, the Contra Costa County Library, the City of San Ramon Parks and Community Services Department, and the East Bay Regional Parks District. Public service and recreation letters are provided in Appendix H. Additional information was obtained from the City of San Ramon General Plan.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on fire protection, police protection, schools, libraries, parks, and recreation were less than significant after mitigation in Sections 4.4, 4.5, and 4.6 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all impacts related to public services were less than significant and did not require mitigation in Section 4.8 of the document. The City Civic Center EIR scoped out the recreation topical area and its associated issues during the Initial Study/Notice of Preparation process as effects found not to be significant. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.11.2 - Environmental Setting

Fire Protection and Emergency Medical Services

The San Ramon Valley Fire Protection District (Fire District) provides fire protection and emergency medical services (EMS) to a 155-square-mile area encompassing the City of San Ramon, the Town of Danville, and the unincorporated communities of Alamo, Blackhawk, Diablo, Southern Morgan Territory, and Tassajara Valley. The Fire District is an autonomous special district governed by an elected Board of Directors. The Fire District is headquartered at 1500 Bollinger Canyon Road, San Ramon, adjacent to Station No. 38.

Stations and Facilities

The Fire District operates 10 fire stations, including four in San Ramon. The four San Ramon stations, along with apparatus and staffing, are summarized in Table 4.11-1. The locations of Fire District facilities in the project vicinity are shown on Exhibit 4.11-1. The Fire District has plans to relocate an existing fire station (Station 36) in the Tassajara Valley in 2008 to better serve planned development in the area.

Table 4.11-1: Fire Station Summary

Station No.	Address	Distance From Project Site	Apparatus		Staffing
			Quantity	Equipment	
34	12599 Alcosta Boulevard	0.7 mile	2	Type 1 Engines	Two company station (6 personnel) cross staff equipment
			1	Ladder Truck	
			1	Type 3 Engine	
			1	Ambulance	
			1	Urban Search and Rescue Vehicle	
38	1600 Bollinger Canyon Road	2.7 miles	1	Type 1 Engine	Single company station (3 personnel) cross staff equipment
			1	Ambulance	
			1	Water Tender	
39	9399 Firecrest Lane	3.4 miles	1	Type 1 Engine	Single company station (5 personnel) cross staff equipment
			1	Ambulance	
			1	Type 3 Engine	
30	11445 Windemere Parkway	3.6 miles	1	Type 1 Engine	Single company station (3 personnel) cross staff equipment. Station is designed to accommodate two companies
			1	Type 3 Engine	

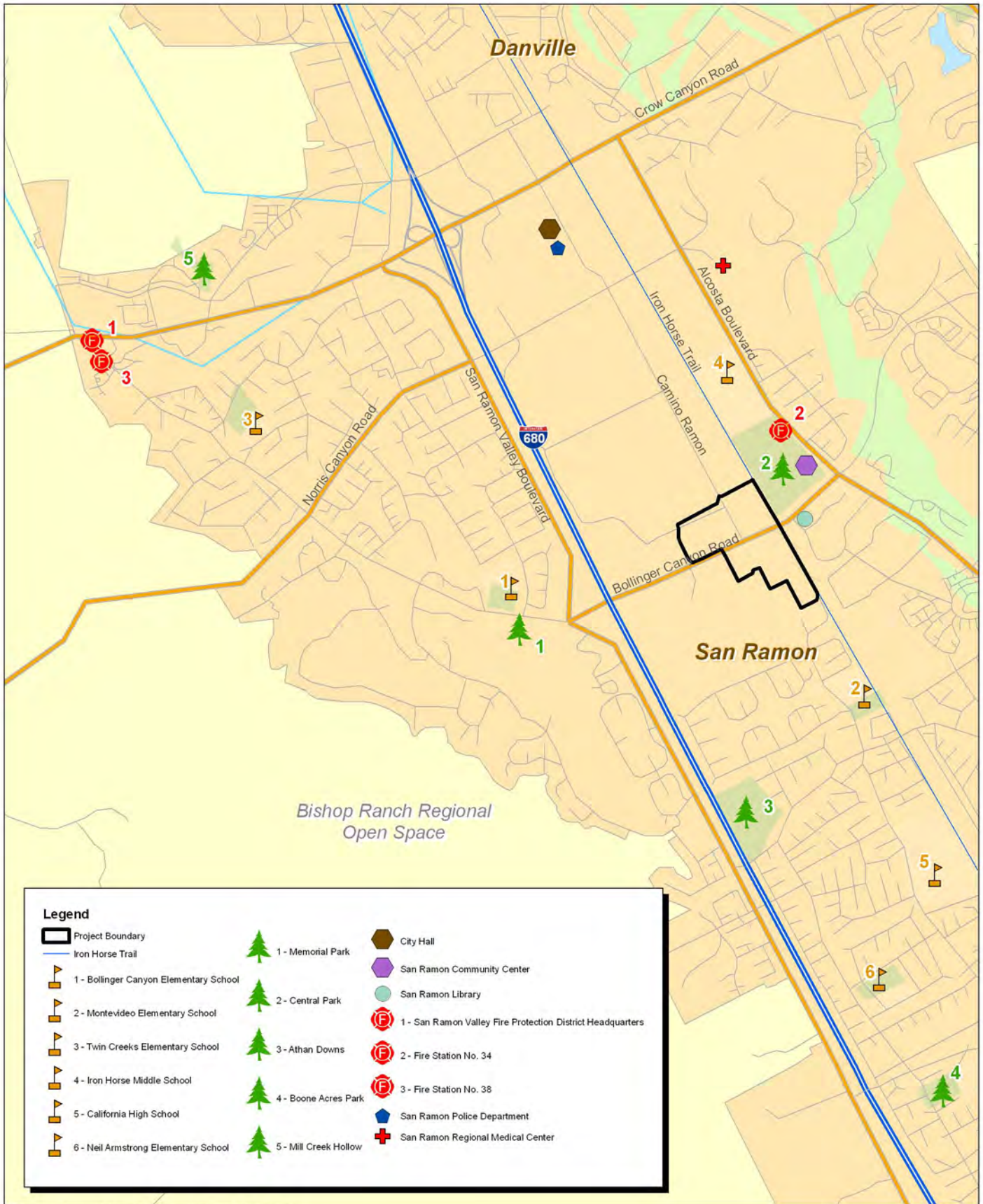
Source: San Ramon Valley Fire Protection District, 2007.

Stations 31 and 35 in Danville also respond to calls for service in San Ramon.

In addition, the Fire District operates its own Communications Center, located at Station 31. The Communications Center is staffed with two dispatchers, one supervising dispatcher, and a mobile command post supported by 11 volunteers.

Apparatus

The Fire District’s urban apparatus is summarized in Table 4.11-2.



Source: StreetMap USA and MBA GIS Data.



Exhibit 4.11-1 Public Facilities Location Map

Table 4.11-2: Urban Apparatus Summary

Apparatus	Quantity	Notes
Type 1 Engines	19	Equipped with Advanced Life Support emergency medical equipment (oxygen, defibrillator units, and medications)
Type 1 Ladder Trucks	3	Each truck is equipped with a 100-foot ladder
Type 2 Ladder Truck	1	Truck equipped with a 55-foot ladder
Type 3 and Type 4 Engines	11	Type 3 Engines equipped with Advanced Life Support medical equipment; assigned to Wildland Unit
Rescue Medic Ambulance Units	5	Equipped with Advanced Life Support medical equipment, Hurst tools, and rope rescue equipment
Reserve Ambulance Units	4	Can be placed into action immediately to cover maintenance needs or assist in large-scale incidents
Multi-Casualty Unit	1	Used for large-scale incidents
Breathing Support Unit	1	Used to fill high- and low-pressure air bottles; also equipped with large pop-up scene lights, salvage equipment, and medical supplies
Hazardous Materials Modular Response Vehicle	1	Equipped with hazardous material detection equipment and supplies and computer-linked to hazardous material information sources
Urban Search and Rescue Vehicle	1	Equipped with ropes, hardware and rescue baskets
Source: San Ramon Valley Fire Protection District, 2007.		

Staffing

The Fire District employs 182 personnel, in addition to approximately 50 reserves. Of these, 148 personnel are assigned to the Suppression Division, which serves as the first responder to most calls for service. Suppression personnel include the following:

- 3 battalion chiefs
- 39 captains
- 42 engineers
- 55 firefighters(50 of whom are paramedics)
- 9 dispatchers

Paid personnel staff nine of the Fire District’s 10 stations, with reserves staffing Station 37 in Southern Morgan Territory. Reserves also augment paid staffing at the other stations. All Suppression Division personnel, excluding dispatchers, are trained Emergency Medical Technicians 1As (EMT-1As) and State Certified Firefighter I and II with specialized defibrillator training. At least one member assigned to each company is a certified single provider Advanced Life Support Paramedic.

The Fire District currently staffs 13 companies on a daily basis and added an additional Advanced Life Support Ambulance with two personnel in July 2007. These personnel cross-staff nine engines, three trucks, five transport Advanced Life Support ambulances and the other specialized vehicles based upon the type of call.

Specialized Units

Rescue Team

The Rescue Team consists of approximately 30 members. The Rescue Team is a proactive organization whose main purposes are to provide immediately available, high-quality technical rescue resources managed by skilled and dedicated personnel, and to provide Fire District-wide, rescue-related training. The team is based at Station 34 on Alcosta Boulevard because of its central location and proximity to Interstate 680 (I-680).

Hazardous Materials Team

The Hazmat Team is based out of Station 35 in Blackhawk and is made up of 26 State Certified Hazardous Materials Technicians/Specialists. The Hazmat Team is capable of specialized entry, chemical analysis, and hazard mitigation.

Response Times and Protocols

The Fire District's goal is an overall response time of 5 minutes, 95 percent of the time. When the first units for a structure fire are dispatched from the 13 staffed emergency response companies, the three closest engines, a ladder truck, and the shift Battalion Chief are automatically assigned. In addition, a rescue medic ambulance can be dispatched in the event one of the occupants of the structure or Fire District personnel needs medical assistance at the scene.

For Fiscal Year 2005–2006, the average emergency response time was 4 minutes, 54 seconds for the Fire District. Table 4.11-3 provides a summary of average response time by station over the past 4 years for the three fire facilities closest to the project site. As shown in the table, average response times from all three stations are under 5 minutes.

Table 4.11-3: Response Times by Fire Station

Station	Average Response Time
34 (12599 Alcosta Boulevard)	4 minutes, 56 seconds
38 (1600 Bollinger Canyon Road)	4 minutes, 48 seconds
39 (9399 Firecrest Lane)	4 minutes, 32 seconds

Includes response times to all emergency calls in the station area regardless of the location of the apparatus dispatched.
Source: San Ramon Valley Fire Protection District, 2007.

Mutual Aid

The Fire District exchanges mutual aid with the four adjacent fire agencies (Alameda County Fire Department, Contra Costa County Fire Protection District, East Contra Costa Fire Protection District,

and Moraga-Orinda Fire Protection District) and Cal Fire (formerly the California Department of Forestry and Fire Prevention). During the 2005–2006 fiscal year, the Fire District extended mutual aid 252 times and received it 45 times.

Performance

The Insurance Services Office (ISO) Public Protection Classification Program currently rates the Fire District a 2 on a scale of 1 to 10, with 1 being the highest possible protection rating and 10 being the lowest. The ISO rating measures individual fire protection agencies against a Fire Suppression Rating Schedule, which includes such criteria as facilities and support for handling and dispatching fire alarms, first-alarm response and initial attack, and adequacy of local water supply for fire-suppression purposes. The ISO ratings are used to establish fire insurance premiums. Only 5 percent of the more than 44,000 fire agencies in the United States receive an ISO 2 rating or higher.

Police Protection

The San Ramon Police Department (Police Department) provides police protection within the San Ramon City limits. The Police Department became an independent, City-sponsored entity on July 1, 2007. Since incorporation in 1983, the City had contracted with the Contra Costa County Office of the Sheriff for police services, although policing operations were conducted under the name of the San Ramon Police Department.

Police Facilities

The Police Department is currently headquartered at 2222 Camino Ramon, in the existing City Hall complex. The location of the Police Department headquarters is shown in Exhibit 4.11-1. The Police Department indicates that the existing headquarters has a number of constraints, including being substandard and undersized for the size of the department and the nature of its activities. The Police Department also leases additional space away from the headquarters in other nearby buildings to accommodate certain police operations that do not have space in the existing building.

The Police Department has a substation in the Dougherty Station Community Center, located at 17011 Bollinger Canyon Road, which opened in 2005. It provides policing services to the community and houses the Dougherty Valley beat officers who patrol the area.

Organization, Staffing, and Resources

The Police Department is authorized 56 sworn police officer positions, 19 full-time equivalent (FTE) non-sworn civilian positions, and 35 volunteer positions, as of January 2007. The Police Department consists of three bureaus: Administration, Operations (Patrol Division, Investigations Division and Traffic Division) and Records. Table 4.11-4 provides a summary of Police Department organization and staffing. The Police Department's staffing ratio is currently 0.72 officer¹ per 1,000 residents,

¹ "Officer" is defined by the General Plan as officers and detectives and excludes the ranks of Sergeant, Lieutenant, Captain or Chief

which is slightly below the City’s adopted standard of 0.8 officer per 1,000 residents. The Police Department has a fleet of 52 vehicles.

Table 4.11-4: Police Department Organizational Summary

Bureau	Status	Positions (Number)	Total
Administration	Sworn and Non-Sworn	Sworn: Chief (1); Captain (1); Lieutenant (1); Sergeant (1); Officer (4) Non-Sworn: Program Manager (1); Administrative Analyst (1); Coordinator (4); Specialist (1); Police Services Technician (1); Clerical (3)	19
Operations	Sworn and Non-Sworn	Sworn: Lieutenant (1); Sergeant (8); Officer (39) Non-Sworn: Police Services Technician (2.5); Specialist (1); Clerical (0.5)	52
Records	Non-Sworn	Coordinator (1); Specialist (1); Clerical (2)	4
Source: San Ramon Police Department, 2007.			

Policing Programs

The Police Department operates several policing programs intended to prevent or addresses crime within certain segments of the community.

Youth crime prevention is a major focus of specialized policing activities. The Police Department sponsors a School Resource Officer Program, a Community and Youth Resource Program, and a Character Counts Program. Each program is assigned a dedicated full-time officer who works directly with youth, parents, schools, and organizations to prevent crime.

The Police Department also has a Crime Prevention Program intended to advise the community about approaches, best practices, strategies, and techniques to avoid or minimize the potential for crime. The Crime Prevention Specialist reviews all development plans for crime prevention measures prior to construction.

Police Activity

The Police Department responded to more than 51,000 calls for service, made more than 800 arrests, and issued more than 12,000 citations in 2006. Table 4.11-5 provides a summary of police activities for 2004 through 2006. The Police Department indicates that, on average, approximately 28 percent of the calls for service are priority (i.e., emergency) and the remaining 72 percent are non-priority.

Table 4.11-5: Police Activity Summary (2004–2006)

Category	2004	2005	2006
Calls for Service	41,471	48,833	51,157
Arrests	573	694	820
Citations Issued	12,631	11,886	12,540

Source: San Ramon Police Department, 2007.

Response Times

The Police Department’s average response time to priority calls for service was less than 3 minutes in 2006. This average response time is within the City’s adopted standard of 3 to 5 minutes for priority calls.

Schools

The San Ramon Valley Unified School District (School District) provides K-12 education to the City of San Ramon, the Town of Danville, and the unincorporated communities of Alamo, Blackhawk, Diablo, and Tassajara Valley. The California Department of Education indicates that 23,815 students were enrolled in the School District in 2005–06, the most recent year information was available.

Table 4.11-6 provides a profile of the School District.

Table 4.11-6: School District Profile (2005–06)

School Type	Number	Enrollment	Full-Time Equivalent Teachers	Pupil-Teacher Ratio	Student-Computer Ratio
Elementary	19	10,707	548.5	19.5	5.0
Middle	7	5,400	218.8	24.7	3.7
High	3	7,191	309.2	23.3	6.2
Alternative	1	406	15.2	26.7	10.2
Continuation	1	111	8.1	13.7	1.5
Total	31	23,815	1,099.8	21.7	—

Source: California Department of Education, 2007.

Local Schools

Table 4.11-7 provides a summary of five schools nearest the project site for the 2005–06 academic year, the most recent year information was available. The four parcels constituting the project site fall within the attendance boundaries of Twin Creeks Elementary School, Iron Horse Middle School, and California High School. These three schools, as well as other nearby schools, are shown in Exhibit 4.11-1.

Table 4.11-7: Local School Summary (2005–06)

School	Grades	Enrollment	Average Class Size	Full-Time Equivalent Teachers	Pupil-Teacher Ratio
Bollinger Canyon Elementary	K-5	483	21.8	24.9	19.4
Montevideo Elementary	K-5	525	22.8	27.6	19.0
Twin Creeks Elementary	K-5	502	21.1	28.1	17.9
Iron Horse Middle	6-8	961	29.6	37.8	25.4
California High	9-12	2,505	29.9	106.4	23.5
Source: California Department of Education, 2007.					

Future Enrollment Growth

The School District is currently in the process of developing new and expanding existing school facilities to meet projected increases in enrollment from planned growth.

Fees from Dougherty Valley development projects have financed new school construction, including the 2,200-student Dougherty Valley High School, scheduled to open for the 2007–08 academic year, and Live Oak Elementary and Gale Ranch Middle School, scheduled to open by 2009. New schools are also planned in the Tassajara Valley.

In addition, two voter-approved school facilities bonds are providing funding for capital improvements. Measure D, approved in 1998, provides \$70 million, while Measure A, approved in 2002, provides \$260 million. Because these two school bonds provide a local source of capital improvement funding, the School District is eligible for matching funds from the State from several recent statewide school bond measures (Propositions 47 and 55). Through 2005, the School District has received more than \$40 million in matching State funds.

Library Services

Contra Costa County Library, a County agency, operates the San Ramon Library located at 100 Montgomery Street in The Market Place. The library facility is owned by the City of San Ramon. The location of the San Ramon library is shown on Exhibit 4.11-1. As of July 2007, the San Ramon Library is open 7 days a week, for a total of 58 hours, and provides programs for children, teens, and adults.

The library opened in 1989 and is 18,238 square feet. The facility was built to house a collection of 55,000 volumes, but currently holds 89,796 items. The entire collection cannot be shelved within the public space. The facility provides 17 computer stations, 13 of which have internet access.

Contra Costa County Library officials indicate that the library has a number of facility constraints that limit the delivery of library services. The facility does not meet the accessibility requirements of the American’s with Disabilities Act (ADA). Space within the library is at a premium, and no additional space is available to increase the collection, computer, or reading areas. The facility has poor

acoustics, and interior noise levels are often above what would normally be appropriate for a library. In addition, parking for library patrons is often unavailable because of parking demand from the neighboring commercial uses in The Market Place.

The Contra Costa County Library also operates the Dougherty Station Library at 17017 Bollinger Canyon Road. This library opened in 2005, totals 11,600 square feet, and is open 50 hours a week (as of July 2007). The library was designed to be expanded by 30,000 square feet to a total size of 41,600 square feet. The expansion will be timed in conjunction with the second phase of the nearby Diablo Valley College facility, which is projected to occur between 2010 and 2013.

Performance Standards

The City of San Ramon has an adopted standard of 0.5 square foot of library space per capita and 2 open hours per week per 1,000 residents. The Dougherty Valley Library and the San Ramon Library currently total 29,838 square feet and are open a combined 108 hours a week. Using the City's 2007 population estimate of 58,035 persons, there is a current ratio of 0.51 square foot of library space per resident, which exceeds the adopted square footage standard, and a ratio of 1.86 open hours per 1,000 residents, which is below the adopted standard.

Parks, Recreation, and Community Facilities

The City of San Ramon Parks and Community Services Department and the East Bay Regional Parks District maintain parks, open space, trails, and community facilities for public use in San Ramon. Parks, recreational facilities, and community facilities in the project vicinity are shown on Exhibit 4.11-1.

Parks

The City of San Ramon Parks and Community Services Department maintains 58 park sites totaling 310.85 acres. Of the 58 sites, 43 are dedicated community parks, neighborhood parks or specialized recreational areas or facilities, and the remaining 15 are school parks. Park facilities in the project vicinity are summarized below.

Central Park

Central Park, located east of Parcel 3A, is the largest active park in the City of San Ramon. The park encompasses 42.8 acres and contains two soccer pitches, four multi-use athletic fields (e.g., soccer, cricket, baseball, and softball), a baseball field, volleyball courts, basketball courts, tennis courts, a skate park, a children's playground, and picnic areas. The multi-use athletic fields and basketball courts are lighted; the basketball courts can be lighted 24 hours a day, and the multi-use athletic fields are lighted until 10 p.m.

Memorial Park

Memorial Park is located west of the intersection of Bollinger Canyon Road and San Ramon Valley Boulevard. The park contains a baseball field, a BMX track, a playground, a dog run, and multi-use grass area.

Iron Horse Middle School Park and Gym

The Iron Horse Middle School Park and Gym are co-operated by the City and the San Ramon Valley Unified School District and are immediately adjacent to the north side of Central Park. Park and gym facilities are available for public use during non-school hours. Facilities include outdoor basketball courts and indoor multi-use facilities for activities such as basketball, volleyball, gymnastics, and aerobics.

Open Space

East Bay Regional Parks District owns and maintains open space within and around San Ramon. The Bishop Ranch Regional Preserve is the primary open space area in San Ramon and is described below.

Bishop Ranch Regional Preserve

The Bishop Ranch Regional Preserve consists of 529 acres located on the western city limit of San Ramon. The only facilities in the preserve are multi-use trails and staging areas for horseback riding.

Trails

The primary trail in the project vicinity is the Iron Horse Trail, which is described below.

Iron Horse Trail

The Iron Horse Trail is a multi-use, Class I, 24.47-mile paved trail stretching from Pleasanton to Concord along the former Southern Pacific Railroad San Ramon Branch Line right-of-way. In Contra Costa County, the County owns the railroad right-of-way and leases a 20-foot-wide corridor within the right-of-way -to East Bay Regional Parks District for use as a public trail. As part of that lease agreement, the East Bay Regional Parks District is responsible for the operation and ongoing maintenance the Iron Horse Trail. Future plans identify the extension of the trail into Livermore.

Within the project vicinity, the trail corridor forms the eastern boundary of Parcel 3A and is located just east of the Bishop Ranch 1 East roadway. The trail crosses Bollinger Canyon Road at grade at the signalized Bishop Ranch 1 East roadway intersection. The trail surface is concrete north of Bollinger Canyon Road and asphalt south of the road. Landscaping and benches are located on the north and south sides of Bollinger Canyon Road. Pathways link the trail to surrounding land uses, including Central Park, Bishop Ranch 1, and Bishop Ranch 3.

Community Facilities

The San Ramon Community Center is the only community facility in the project vicinity. The 23,000-square-foot Community Center is located in the eastern portion of Central Park and contains multi-purpose rooms, meeting venues, and offices.

Performance Standards

The City of San Ramon has an adopted standard of 6.5 acres of public parks per 1,000 residents. Using the City's 2007 population estimate of 58,035 persons, there is a current ratio of 5.36 acres of public parks per 1,000 residents, which is below the adopted standard.

The City has an adopted standard of 1.2 square feet of community center space per capita. Including the 28,000-square-foot community center at Dougherty Station and the San Ramon Senior Center, there is a current ratio of 1.15 square feet of community center space per capita, which is slightly below the adopted standard.

4.11.3 - Regulatory Framework

State

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes
- Building standards that have been adopted and adapted from the national model code standards to meet California conditions
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns

The California Fire Code is a component of the California Building Standards Code and contains fire safety-related building standards.

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following performance standards for public services:

- **Fire Protection:** A maximum 5-minute total response time can be maintained for 90 percent of emergency calls in urban and suburban areas and/or that there will be a fire station within 1.5 miles of all development.
- **Police Protection:** A minimum ratio of 0.8 officers per 1,000 residents and 3-5 minute response time for emergency calls and a 20-minute response for all other calls can be maintained 95 percent of the time.
- **Schools:** New development must provide necessary funding and/or capital facilities, as determined by the San Ramon Valley Unified School District.

- **Library Services:** A minimum ratio of 0.5 square feet of library space per capita, 3 volumes per capita, and 2 open hours per week per 1,000 residents.
- **Parks:** A minimum ratio of 6.5 acres of public park per 1,000 residents, with a goal to have park and recreation facilities within 0.5 mile of all residences.
- **Community Facilities:** A minimum ratio of 1.2 square feet of community center space per capita residents.

In addition, the City of San Ramon General Plan establishes the following relevant policies related to public services and recreation:

- **Policy 2.4-I-16:** Evaluate the ability of new development to pay for its infrastructure, its share of public and community facilities, and the incremental operating costs it imposes.
- **Policy 2.4-I-17:** Existing City development review practices assure that new development provides for the capital facilities needed to serve it. Ongoing maintenance of those facilities—generally via infrastructure landscaping and lighting districts—is also typically provided for. While the defraying of such costs by new development would normally be expected, some projects may contribute to the community in ways that compensate for a negative fiscal impact.
- **Policy 3.1-G-1:** Manage the City’s growth in a way that balances existing and planned transportation facilities, protection of open space and ridgelines, provision of diverse housing options and job opportunities, and the preservation of high quality community facilities and services.
- **Policy 3.1-I-7:** Allow urban development only within the City’s Urban Growth Boundary (see Implementing Policy 4.6-I-1) and only in accord with a plan for full urban services (police, fire, parks, water, sewer, streets and storm drainage) to which all providers are committed.
- **Policy 3.2-G-1:** Ensure the attainment of public facility and service standards through the City’s development review process, Capital Improvement Program, and a variety of funding mechanisms to maintain existing facilities and help fund expansion.
- **Policy 3.2-I-3:** Require new development to fund public facilities and infrastructure that is deemed necessary to mitigate the impact of that new development.
- **Policy 3.2-I-4:** Levy mitigation fees for public facilities and infrastructure improvements in proportion to a new development’s impact.
- **Policy 4.6-I-13:** Provide high quality public facilities, services, and other amenities within close proximity to residents.

- **Policy 4.8-I-6:** Seek to assure maximum public access to the Iron Horse Trail through land acquisition, licensing agreements with Contra Costa County, and incentives for dedication and improvement of land for trailhead parks and walkways.
- **Policy 4.8-I-7:** Require new commercial and office development to provide outdoor passive recreation areas.
- **Policy 5.6-I-3:** Emphasize the Iron Horse Trail as a major north-south route for non-motorized transportation.
- **Policy 5.6-I-9:** Study the feasibility of bicycle/pedestrian overcrossings on the Iron Horse Trail at Bollinger Canyon Road and Crow Canyon Road.
- **Policy 6.5-I-5:** Require residential developers to make contributions to the City's park system.
- **Policy 6.5-I-6:** Encourage contributions to the City's park system by non-residential developers.
- **Policy 6.5-I-7:** Complete all parkland dedication requirements for each development prior to occupancy.
- **Policy 6.5-I-8:** Encourage the development of landscaped and dedicated open spaces, parkways, trail systems, and special community service facilities in new developments.
- **Policy 7.1-G-1:** Provide public and cultural facilities that contribute to the City's positive image and enhance community identity.
- **Policy 7.1-I-2:** Maintain City performance standards for libraries in cooperation with the Contra Costa Library System and strive to achieve superior services.
- **Policy 7.2-I-2:** Require that residential development pay fees to the San Ramon Valley Unified School District for the acquisition of school sites to provide adequate, permanent classroom space.
- **Policy 9.4-I-1:** Require site design features and fire retardant building materials to reduce the risk of fire within the City.
- **Policy 9.4-I-5:** Require sprinklers in all mixed use development to protect residential uses from non-residential uses, which typically pose a higher fire risk.

San Ramon Valley Fire Protection District

The Fire District has enacted a comprehensive fire prevention ordinance that includes sprinkler requirements for most commercial buildings and residential buildings exceeding 5,000 square feet.

4.11.4 - Methodology

Inquiries were made with the San Ramon Valley Fire Protection District, the San Ramon Police Department, the San Ramon Valley Unified School District, the San Ramon Library, the City of San

Ramon Parks and Community Services Department, and the East Bay Regional Parks District regarding existing facilities, staffing levels, and service delivery, and potential impacts from implementation of the proposed project. Additional information was obtained from the City of San Ramon General Plan, the City of San Ramon General Plan Environmental Impact Report, the San Ramon Police Department 2006 Annual Report, and agency websites.

4.11.5 - Thresholds of Significance - Public Services

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to public services are significant environmental effects, the following question is analyzed and evaluated for the public services identified:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- a.) Fire Protection?
- b.) Police Protection?
- c.) Schools?
- d.) Parks?
- e.) Other public facilities?

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to recreation are significant environmental effects, the following questions are analyzed and evaluated:

- a.) Would the project 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?
- b.) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

4.11.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Fire Protection and Emergency Medical Services

Impact PSR-1: **Development of the proposed project may create the potential for increased calls and response times that may result in a need for new or physically altered fire facilities in order to maintain acceptable service ratios, response times, or other performance objectives.**

Impact Analysis

The proposed project is located less than 1 mile from station 34 on Alcosta Boulevard and is located in an area where response times are within the 5-minute standard established by the City of San Ramon General Plan Station 34 is staffed by two engine companies, with a total of six personnel. The Fire District took delivery of three state-of-the-art tiller trucks in December 2006. One of the trucks is stationed at Station 34, while the other two are stationed in Danville and Blackhawk. All three trucks have 100-foot aerial ladders. Station 34 also has a variety of other apparatus, including two Type 1 engines, an ambulance, and an urban search and rescue vehicle. In addition to the above referenced resources, other fire stations within the region would be able to respond to emergencies at the proposed project.

The Fire District indicated in a comment letter dated May 1, 2007 in response to the Notice of Preparation that it had concerns about responding to emergencies in the upper floors of the proposed project's high-rise structures and the potential for false alarms generated by the proposed project's mixed-uses. Each concern is discussed below.

The proposed project would include several Plaza District structures in excess of 80 feet above finished grade. The three Bishop Ranch 1A office buildings would be more than 100 feet above finished grade. During fire emergencies in high-rise buildings, communications is a key ingredient to effective and efficient firefighting operations and is critical to the safety of firefighters inside the buildings. High-rise buildings are often not conducive to the interior use of portable radios because specialized building materials and construction techniques tend to block or interfere with radio transmissions. Because of this concern, mitigation is proposed that would require that the building be tested prior to occupancy to ensure compliance with minimum radio signal strengths. In the event deficiencies are detected, radio repeaters or similar technology to boost the effectiveness of radio communications should be incorporated into the project design.

In addition, the high-rise buildings included in Bishop Ranch 1A would present new fire fighting and emergency response challenges to the Fire District. The three Bishop Ranch 1A office buildings would be approximately 110 feet above grade, nearly 25 feet taller than the tallest existing occupied structure in the Fire District boundaries. Firefighting strategies for high-rise buildings of this nature call for attacking the fire from the inside of the structure utilizing interior stairwells and standpipes for access and water supply. Aerial ladders have very limited value in high-rise firefighting. At the present time, the Fire District has no facilities to train for these types of incidents in high-rise buildings. Therefore, mitigation is proposed that would require the project applicant to contribute

their “fair share” to the development of a Fire District facility suitable for high-rise firefighting training.

The Fire District also expressed concerns that the intensity of the proposed project’s mixed-uses may result in a substantial number of false fire alarm calls. The Fire District noted that a false fire alarm call in a multi-story building typically results in the commitment of 13 fire personnel for a minimum of 30 minutes, which would be approximately 25 percent of the available staffing. To reduce the potential for false fire alarms, the Fire District recommends that the City and the project applicant install the most reliable fire alarm technology available in all project structures. This recommendation has been incorporated into the project as a mitigation measure and condition of approval.

Based on the existing levels of service and with the inclusion of the proposed mitigation as project conditions, the Fire District would have adequate resources to serve the proposed project. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM PSR-1a** Prior to occupancy of any of the Plaza District structures or Bishop Ranch 1A office buildings, the project applicant shall test the proposed structures to ensure that the public safety radio signals meets a minimum signal strength of -95 dBm in 90 percent of the area of each floor of the building and a 100-percent reliability factor. Testing shall be conducted by a Federal Communications Commission-certified technician approved by the San Ramon Valley Fire Protection District. In the event radio signal deficiencies are determined, the project proponents shall install a Fire District-approved radio signal amplification system to ensure compliance with minimum signal strengths established by this condition. Any required amplification system shall be maintained in perpetuity by the property owner.

- MM PSR-1b** Prior to occupancy of any project buildings, all structures shall be equipped with the most reliable, commercially available fire alarm technology, as approved by the San Ramon Valley Fire Protection District deemed to be the most reliable available by the San Ramon Valley Fire Protection District. The project applicant shall be responsible for maintaining these systems during project operations.

- MM PSR-1c** Prior to any building occupancy, the project applicant shall provide a “fair share” contribution to the San Ramon Valley Fire Protection District for development of a high-rise firefighting training center.

Level of Significance After Mitigation

Less than significant impact.

Police Protection

Impact PSR-2:	Development of the proposed project would not result in a need for new or physically altered police facilities in order to maintain acceptable service ratios, response times, or other performance objectives.
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Impact Analysis

The proposed project would develop and redevelop a total of approximately 2.1 million square feet of mixed uses (approximately 1.6 million net square feet above existing vested entitlement and approximately 1.9 million square feet of net additional construction above existing site conditions) on 44 acres in an existing urbanized portion of San Ramon. The Police Department estimates that the proposed project would generate between 1,500 and 2,000 calls for service on an annual basis, with approximately 28 percent of the calls being priority calls. The addition of 1,500 to 2,000 calls for service would represent a 2- to 3-percent increase over the Police Department's 2006 figure of 51,157 calls for service. The Police Department indicates that the proposed project would result in a need to hire four to five new officers and two civilian parking enforcement personnel. These additional positions would be expected to be funded through existing City funding sources, as well as new tax revenues generated by the proposed project. The Police Department notes that the proposed project would not be expected to pose any unusual policing challenges or compromise public safety.

The City Hall component of the proposed project includes a new Police Department headquarters. This square footage is sized to accommodate 100 to 125 FTEs (sworn and non-sworn civilian positions), which is the anticipated size of the Police Department by 2015. The Police Department headquarters would include a lobby and front counter, a training/briefing room, administrative offices that would house a Police Records Bureau and the Investigation Division, men's and women's locker rooms with restroom and shower facilities, a secure police armory, a secure evidence storage area, a separate entrance for Police Department personnel, a discreet entrance adjacent to the parking area that would allow officers to bring arrested persons into the building for processing, and secure parking for police vehicles. The Police Department headquarters may also contain an Emergency Operations Center.

The new Police Department headquarters would replace the existing headquarters at 2222 Camino Ramon and allow for the centralization of department functions in one building. The Police Department also indicates that the new headquarters location would be more geographically centralized and would be expected to improve response times to the central and southern portions of the City, as well as to the Dougherty Valley. This is a beneficial aspect of the proposed project. At the time of this writing, the City has not identified what it will do with the existing Police Department facility once the new one opens.

In summary, the proposed project would increase demand for police protection. However, the proposed project includes a new centrally located Police Department headquarters in City Hall that would be in close proximity to the Plaza District, Bishop Ranch 1A, as well as surrounding land uses such as The Shops at Bishop Ranch, Chevron Park, Central Park, and The Market Place. The new Police Department headquarters would be sized to accommodate additional forecasted staffing increases and would enhance response times throughout the City limits. Because it includes a new Police Department headquarters, the proposed project would not require the construction or physical alteration of any other Police Department facilities in San Ramon. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Schools

Impact PSR-3: **Development of the proposed project would not result in a need for new or physically altered school facilities in order to maintain acceptable pupil-teacher ratios or other performance objectives.**

Impact Analysis

The proposed project’s 487 residential units would directly cause population growth and increase enrollment in the School District. Using student generations for multi-family residential units provided by the School District, the proposed project would add an estimated 155 students to local schools. Table 4.11-8 provides a summary of the proposed project’s student generation by school type.

Table 4.11-8: Project Student Generation

School Type	Student Generation Factor (Student/Unit)	Students Generated
Elementary	0.23	112
Middle	0.40	19
High	0.50	24
Total	0.33	155
Source: San Ramon Valley Unified School District, 2007.		

The School District indicates that, based on May 2007 enrollment figures, the students generated by the proposed project would exceed available capacity at Twin Creeks Elementary School and would

exacerbate existing capacity deficiencies at California High School; Iron Horse Middle School would have sufficient capacity to accommodate the proposed project's student generation. Note that enrollment figures fluctuate on a regular basis and available capacity (or lack thereof) may be substantially different when the proposed project opens, tentatively scheduled for 2010. The planned opening of Dougherty Valley High School at the beginning of the 2007–08 academic year would relieve California High School of its capacity constraints.

To address the proposed project's impacts on schools, the project applicant would be required to provide development fees, currently \$6.93 per square foot of new residential construction and \$0.42 per square foot of new commercial construction, to the School District at the time building permits are sought for the proposed project's residential and commercial components. The fees can only be used for capital improvements for school facilities. The School District is currently in the midst of an ongoing, multi-year, capital improvement program that will increase school capacity to accommodate increased enrollment from planned growth within its boundaries. This includes expansion of existing schools (e.g., California High School) and construction of new schools (e.g., Dougherty Valley High School) in San Ramon. Note that the School District has other available funding sources for capital improvements, including two voter-approved school bond measures. The School District also indicated that attendance boundary changes may be one solution to providing adequate capacity. For these reasons, it is expected that the School District will have adequate classroom capacity to accommodate students generated by the proposed project.

Government Code Section 65995 prohibits a local agency from either denying approval of a land use project because of inadequate school facilities or imposing school impact mitigation measures other than designated fees. Therefore, payment of development fees to the School District would address the proposed project's impacts on schools and ensure that impacts are less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Library Services

Impact PSR-4: Development of the proposed project would not result in a need for new or physically altered library facilities in order to maintain acceptable service ratios or other performance objectives.

Impact Analysis

The proposed project is projected to directly add an estimated 1,264 residents to the City's population², which represents a 2.2-percent increase over the City's 2007 population estimate of 58,035. This population increase would be expected to translate into additional demand for library services at the San Ramon Library. As previously mentioned, the existing San Ramon Library is undersized and has substantial constraints that limit library services. Contra Costa County Library officials indicate that the existing library facility is no longer adequate to meet the needs of San Ramon residents. The addition of new library patrons generated by the proposed project would contribute slightly to the existing deficiencies in library services.

The City Hall component of the proposed project includes a new library sized to accommodate approximately 200,000 books and audiovisual materials. The library would contain public computers located in a Technology Lab, a Homework Center, reader seats, group study rooms, a community conference room, a community meeting/program room, and a storytelling and class visit space.

The new library would replace the existing substandard and undersized library at 100 Montgomery Street. Contra Costa County Library officials indicate that the new library facility would allow for enhanced library offerings to the community through increased collection size, more computer stations, and better-defined areas acoustically designed for intensive use. This is a beneficial aspect of the proposed project. At the time of this writing, the City has not identified what it will do with the existing library facility once the new one opens.

In summary, the proposed project would likely increase demands for library services. However, the proposed project includes a new, larger, and more technologically advanced library in City Hall that would allow for enhanced delivery of library services to the community. Because it includes a new library, the proposed project would not require the construction or physical alteration of any other library in San Ramon. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

² This estimate was derived by multiplying the City of San Ramon's 2007 average household size of 2.597 persons (provided by the California Department of Finance) by the 487 residential units contained in the project.

Parks

Impact PSR-5: **Development of the proposed project would not result in a need for new or physically altered parks in order to maintain acceptable parkland ratios.**

Impact Analysis

The proposed project is projected to directly add an estimated 1,264 residents to the City's population. This population increase would be expected to have a corresponding increase in usage for City park facilities.

Because the proposed project would not dedicate any park acreage to the City, it would be required to provide standard in-lieu-of fee payments for the up to 487 residential units to the City for the acquisition and development of parkland elsewhere. These fee payments would be made at the time building permits are sought. The City does not require parkland dedication or in-lieu-of fees for non-residential development. Parkland development projects funded by the proposed project's in-lieu-of fee payments have not been identified at the time of this writing. Furthermore, these projects are outside of the scope of this EIR and would be subject to separate environmental review.

The proposed project would be located in close proximity to Central Park, the City's largest active park. The location of the proposed project near Central Park is consistent with the City's goal of having park and recreation facilities within 0.5 mile of all residences. City parks officials indicated that they do not anticipate any deterioration or degradation of the quality of Central Park caused by additional use by project residents, employees, or visitors. Moreover, City parks officials indicate that they foresee a benefit of locating multi-story residential uses close to the park because it would provide an "extra set of eyes" on the park and may serve as a deterrent to potential acts of vandalism or other crimes.

In summary, the proposed project would increase the City's population and have a corresponding increase in park usage. The proposed project would provide standard in-lieu-of payments to acquire and develop additional parkland to offset its contribution to increase park usage. In addition, the proposed project would be expected to enhance the safety of Central Park and would not cause deterioration of the park through increased usage. For these reasons, the proposed project would have a less than significant impact on parks.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Trails

Impact PSR-6: Development of the proposed project may cause physical deterioration of the Iron Horse Trail, resulting in a need for safety improvements.

Impact Analysis

The proposed project would be located next to the Iron Horse Trail. A pedestrian linkage would be provided between the Plaza District and the trail that would include a crossing of the extended Bishop Drive. The existing pedestrian crossings of the Bishop Ranch 1 East road would be maintained.

Below is analysis of the proposed project potential impacts on the Iron Horse Trail.

Bishop Drive Extension

The extension of Bishop Drive would parallel the trail and create the potential for bicycle/pedestrian conflicts with automobiles. To protect the safety of both trail users and motorists, a fence and landscape buffer is proposed along the trail frontage with Bishop Drive. The fence and landscape buffer would provide a physical separation between the roadway and the trail and would channel trail users to a single, signalized crossing of Bishop Drive. This is incorporated into the project as a mitigation measure.

Bollinger Canyon Road Crossing

Currently, there is a signalized, at-grade crossing of the roadway that results in delays for both trail users and motorists during peak hour commute periods. The City of San Ramon is currently undertaking a feasibility study of grade separating the Iron Horse Trail crossing at Bollinger Canyon Road, consistent with General Plan Policy 5.6-I-9. At the time of this review, the feasibility study is not yet complete. A grade-separated crossing of Bollinger Canyon Road is not part of the proposed project and, therefore, is outside the scope of this DSEIR. Any future proposals to build a grade-separated crossing will be subject to separate environmental review.

Trail Deterioration

The proposed project is intended to be a cultural, civic, and entertainment destination and would be expected to result in increase use of the trail in the vicinity of the project site. The proposed project is expect to house 1,264 residents and provide employment for 3,636 workers. Relative to the total population and workforce of San Ramon, as well as the other communities along the Iron Horse Trail, this increase in potential trail users represents an insignificant number relative to existing population and employment numbers. In addition, based on observed trail usage in San Ramon, there is a large percentage of the population that rarely uses the trail or does not use it at all. Therefore, it would be reasonable to assume that the proposed project would have similar usage levels and would not result in a dramatic increase in trail usage.

Related to this, a 2006 transportation survey conducted by the City of San Ramon Transportation Demand Program indicated that only 1.2 percent of employees within the City bike to work and 0.6 percent walk to work. When these rates are applied to project employment, potential trail use represents approximately 44 new bicyclists and 22 pedestrians.

Moreover, the potential for physical deterioration of the Iron Horse Trail surface between Bollinger Canyon Road and Norris Canyon Road is substantially lower than other segments of the trail because it is composed of concrete instead of asphalt. Concrete is stronger and more resistant to wear and water damage than asphalt and the segment of the trail between Bollinger Canyon Road and Norris Canyon Road is in better condition than other asphalt segments of the trail. Therefore, because of the durability of concrete, the segment of the trail adjacent to the Plaza District would not be expected to physical deteriorate as a result of greater use associated with the proposed project.

After-Hours Usage

The East Bay Regional Parks District has an ordinance that prohibits the use of its trails between 10 p.m. and 5 a.m. District representatives have expressed concerns about the potential for after-hour use of the Iron Horse Trail given its proximity to the Plaza District, which contains uses such as a hotel, cinema, and restaurants that would attract persons during the nighttime hours.

However, there are practical limitations to trail usage between 10 p.m. and 5 a.m. There is no lighting along any segments of the trail and the proposed project would not add any lighting to the trail corridor. Spillover lighting onto the trail corridor from the proposed project would be minimal because of the large residential structures on Blocks F-G. These structures would be more than 85 feet above grade and would act as a barrier to light and glare from the center of the Plaza District. In addition, street lighting on Bishop Drive would be directed toward the roadway and away from the trail corridor. The lack of lighting serves as an effective deterrent to after-hours trail usage and, therefore, there would be no reason to assume the proposed project would necessitate additional measures to prevent after-hours usage.

Summary of Impacts

The development of the proposed project may create the potential for unsafe crossings of the future Bishop Drive by Iron Horse Trail users. Mitigation is proposed that would require the installation of a fence and landscape buffer along the trail frontage with Bishop Drive. With the implementation of the mitigation measure below, all impacts on the Iron Horse Trail would be reduced to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM PSR-6 Prior to occupancy of any of the Plaza District structures, the project proponent shall install a fence and landscape buffer along the entire length of the Iron Horse Trail frontage with Bishop Drive. The fence and landscape buffer shall be designed to prevent bicyclists and pedestrians from making unauthorized crossings of Bishop Drive between the Plaza District and the Iron Horse Trail. As part of this improvement, a single entry point to the Iron Horse Trail from the Plaza District shall

be created. The project applicant shall submit plans showing the fence and landscape buffer to East Bay Regional Parks District for review and comment and the City of San Ramon for review and approval. All fence and landscape improvements within the Iron Horse Trail corridor shall be dedicated to Contra Costa County and maintained by East Bay Regional Parks District for ongoing management pursuant to the license agreement with the County. East Bay Regional Parks District shall have the option to pursue a maintenance agreement with the project proponents to ensure that the landscape improvements are maintained to a mutually agreeable level.

Level of Significance After Mitigation

Less than significant impact.

Community Facilities

Impact PSR-7: Development of the proposed project would not result in a need for new or physically altered community facilities in order to maintain acceptable ratios.

Impact Analysis

The proposed project is projected to directly add an estimated 1,264 residents to the City's population. This population increase would be expected to have a corresponding increase in usage for City community facilities.

New community facilities would be provided in the City Hall component of the proposed project. Public meeting rooms would be provided in City Hall and the library, as well as a new Council Chambers. These facilities would add to the City's supply of community facilities and offset any potential impacts associated with population growth.

In addition, the proposed project would be located close to the San Ramon Community Center in Central Park. City parks officials indicated that they do not anticipate any deterioration or degradation of the quality of Community Center caused by additional use by project residents, employees, or visitors.

For these reasons, the proposed project would have a less than significant impact on community facilities.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

4.12 - Transportation

4.12.1 - Introduction

This section describes the existing setting regarding transportation and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Traffic Operations Evaluation, prepared in July 2007, by DMJM Harris, included in this EIR as Appendix I.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all transportation impacts were less than significant after mitigation in Section 4.2 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all transportation impacts were less than significant after mitigation in Section 4.2 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project, and new analysis is provided for potential impacts not previously considered in those documents.

4.12.2 - Environmental Setting

Roadway Network

The roadway network consists of a hierarchy of roadway classifications ranging from freeway to local roadway. The four roadway classifications in the project vicinity are summarized below.

Freeways

Freeways serve regional and inter-city trips and are under the jurisdiction of the State of California Department of Transportation (Caltrans). Interstate 680 (I-680) is a north-south freeway bisecting the San Ramon Valley, providing direct regional access to Alameda and Santa Clara counties to the south and northern Contra Costa and Solano counties to the north. I-680 also interchanges with Interstate 580 (I-580) in Dublin/Pleasanton, which provides east-west regional access to Oakland and San Francisco (west) and the Central Valley (east).

Between I-580 and State Route 24 (SR-24) in Walnut Creek, I-680 has three mixed flow lanes and one high-occupancy vehicle lane (HOV) in each direction. Auxiliary lanes have recently been constructed on I-680 between Bollinger Canyon Road and Crow Canyon Road in San Ramon, and between Diablo Road and Sycamore Valley Road in Danville. The Bollinger Canyon Road and Crow Canyon Road interchanges are the two primary access points to I-680 in the project vicinity.

I-680 is a designated Route of Regional Significance by the Contra Costa Transportation Authority (CCTA) and the Tri-Valley Transportation Action Plan. Routes of Regional Significance are roads that serve regional mobility, or act as reliever routes for the regional systems, and serve more than one jurisdiction. A route of Regional Significance is required to meet designated Traffic Service Objectives (TSO).

Arterial Roadways

Arterials handle high traffic volumes, provide intra-city circulation and serve, to a limited degree, local land use. These facilities provide access to major activity centers and to freeways. In the project vicinity, the following roadways are arterials and are designated Routes of Regional Significance:

- Crow Canyon Road (4 to 8 lanes)
- Bollinger Canyon Road (6 to 8 lanes)
- Alcosta Boulevard (4 lanes)
- San Ramon Valley Boulevard (4 lanes)
- Dougherty Road (6 lanes)

Note that Crow Canyon Road was widened to eight lanes from six lanes between I-680 and Alcosta Boulevard in June 2007. A Plan Line study is being prepared for Bollinger Canyon Road. A Plan Line study establishes the need for future widening along a corridor and then determines how that widening can occur through lane transitions and right-of-way acquisition. The Plan Line study for Bollinger Canyon Road widens the corridor to eight lanes between I-680 and Alcosta Boulevard and six lanes between Alcosta Boulevard and Canyon Lakes Drive, with additional turn lanes at intersections.

Collector Streets

Collector streets are next in the hierarchy of street classifications. They carry less traffic than arterials and provide a higher level of access to local land uses. In the project vicinity, the following roadways are collector streets:

- Camino Ramon (4 lanes)
- Norris Canyon Road (2 to 4 lanes)
- Montevideo Drive (2 lanes)

Local Roadways

Local roadways follow collector streets in the hierarchy of street classifications. Local streets carry the least amount of traffic but provide the highest level of local access. In the project vicinity, the following streets are local streets:

- Executive Parkway (2 lanes)
- Bishop Drive (2 lanes)
- Sunset Drive (4 lanes)
- Market Place (2 lanes)

Intersection Operations

Study Intersections

Based upon discussions with City of San Ramon staff, 30 intersections were identified as critical intersections that could be impacted by trips generated by the proposed project. Of the 30 intersections, 29 are existing intersections and one is a future intersection that would be constructed as part of the proposed project (Camino Ramon and Center Street). The 30 intersections are listed in Table 4.12-1 along with their current traffic control device and count dates. These intersection locations are shown on Exhibit 4.12-1.

Table 4.12-1: Study Intersections

No.	Intersection	Existing Control	Count Dates	
			AM Peak Hour	PM Peak Hour
1	Crow Canyon Road/San Ramon Valley Boulevard	Signal	May 2006	May 2006
2	Crow Canyon Road/I-680 Southbound Ramps	Signal	May 2006	May 2006
3	Crow Canyon Road/I-680 Northbound Ramps	Signal	May 2006	May 2006
4	Crow Canyon Road/Camino Ramon	Signal	May 2006	May 2006
5	Crow Canyon Road/Alcosta Boulevard	Signal	May 2006	May 2006
6	Camino Ramon/Norris Canyon Road	Signal	May 2006	May 2006
7	Camino Ramon/Executive Parkway	Signal	May 2006	May 2006
8	Camino Ramon/Bishop Drive	Signal	May 2006	May 2006
9	Bollinger Canyon Road/San Ramon Valley Boulevard	Signal	May 2006	May 2006
10	Bollinger Canyon Road/I-680 Southbound Ramps	Signal	May 2006	May 2006
11	Bollinger Canyon Road/I-680 Northbound Ramps	Signal	May 2006	May 2006
12	Bollinger Canyon Road/Sunset Drive/Chevron Park	Signal	May 2006	May 2006
13	Bollinger Canyon Road/Camino Ramon	Signal	May 2006	May 2006

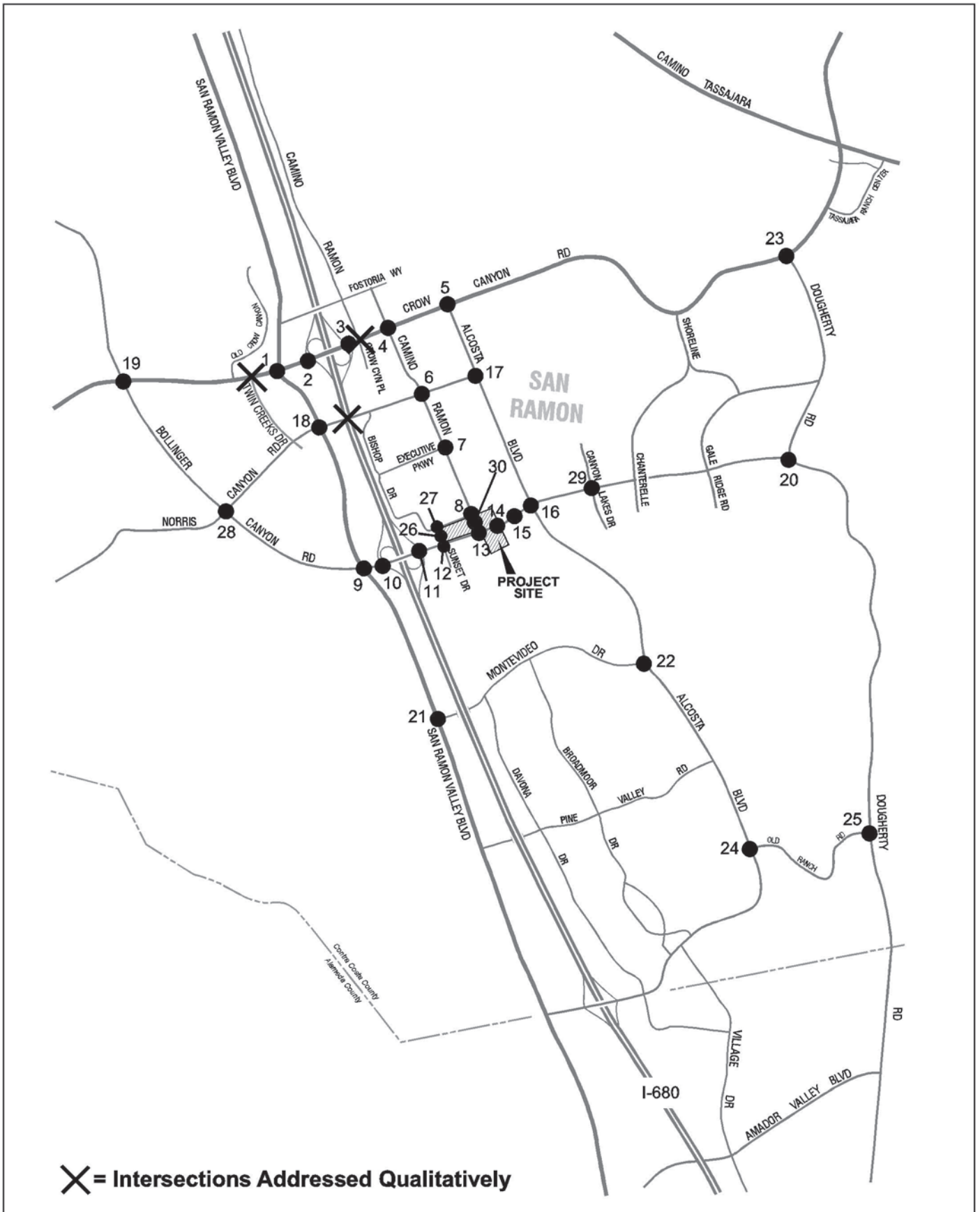
Table 4.12-1 (Cont.): Study Intersections

No.	Intersection	Existing Control	Count Dates	
			AM Peak Hour	PM Peak Hour
14	Bollinger Canyon Road/Bishop Ranch 1 East	Signal	May 2006	May 2006
15	Bollinger Canyon Road/Market Place	Signal	May 2006	May 2006
16	Bollinger Canyon Road/Alcosta Boulevard	Signal	May 2006	May 2006
17	Alcosta Boulevard /Norris Canyon Road	Signal	May 2006	May 2006
18	San Ramon Valley Boulevard/Norris Canyon Road	Signal	May 2006	May 2006
19	Bollinger Canyon Road/Crow Canyon Road	Signal	May 2006	May 2006
20	Bollinger Canyon Road/Dougherty Road	Signal	May 2006	May 2006
21	San Ramon Valley Boulevard/Montevideo Drive	Signal	February 2007	February 2007
22	Alcosta Boulevard/Montevideo Drive	Signal	February 2007	February 2007
23	Crow Canyon Road/Dougherty Road	Signal	May 2006	May 2006
24	Alcosta Boulevard/Old Ranch Road	AWSC	February 2007	February 2007
25	Old Ranch Road/Dougherty Road	AWSC	February 2007	February 2007
26	Sunset Drive/Shops at Bishop Ranch	Signal	May 2006	May 2006
27	Bishop Drive/Sunset Drive	Signal	May 2006	May 2006
28	Bollinger Canyon Road/Norris Canyon Road	AWSC	February 2007	February 2007
29	Bollinger Canyon Road/Canyon Lakes Drive	Signal	May 2006	May 2006
30	Camino Ramon/Center Street (future)	--	--	--
Notes: Signal = signalized intersection Source: DMJM Harris, 2007.				
AWSC = All-Way Stop Control (stop sign)				

In addition to the 30 study intersections listed above, three intersections were analyzed qualitatively. These intersections are Crow Canyon Road/Twin Creeks Drive, Crow Canyon Road/Crow Canyon Place, and Norris Canyon Road/High Occupancy Vehicle Ramp (future intersection). Traffic operations at these locations can be estimated from surrounding locations; therefore, these intersections were not evaluated quantitatively.

Level of Service Criteria

The City of San Ramon uses the intersection Level of Service (LOS) analysis methodology required by CCTA's Technical Procedures, termed CCTALOS (Contra Costa Transportation Authority Level of Service), which relates service-level grades to a volume-to-capacity ratio. The volume-to-capacity



Source: DMJM HARRIS | AECOM, June 2007.



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Exhibit 4.12-1 Study Intersections

ratio relates the total traffic volumes for critical opposing movements to the theoretical capacity for those movements, and is applicable for signalized intersections. Unsignalized intersections (stop-controlled) are evaluated by measuring delay in seconds. Table 4.12-2 describes each service-level grade and associated volume-to-capacity ratio or delay.

Table 4.12-2: Intersection Level of Service Definitions

Level of Service	Description	Intersection Type	
		Signalized (Volume-to-Capacity Ratio)	All-Way Stop Control (Delay in seconds/vehicle)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream.	< 0.61	0–10
B	Stable traffic. Traffic flows smoothly with few delays.	0.61–0.70	> 10–15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	0.71–0.80	> 15–25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	0.81–0.90	> 25–35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	0.91–1.00	> 35–50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	> 1.00	> 50

Source: Contra Costa Transportation Authority, 2007.

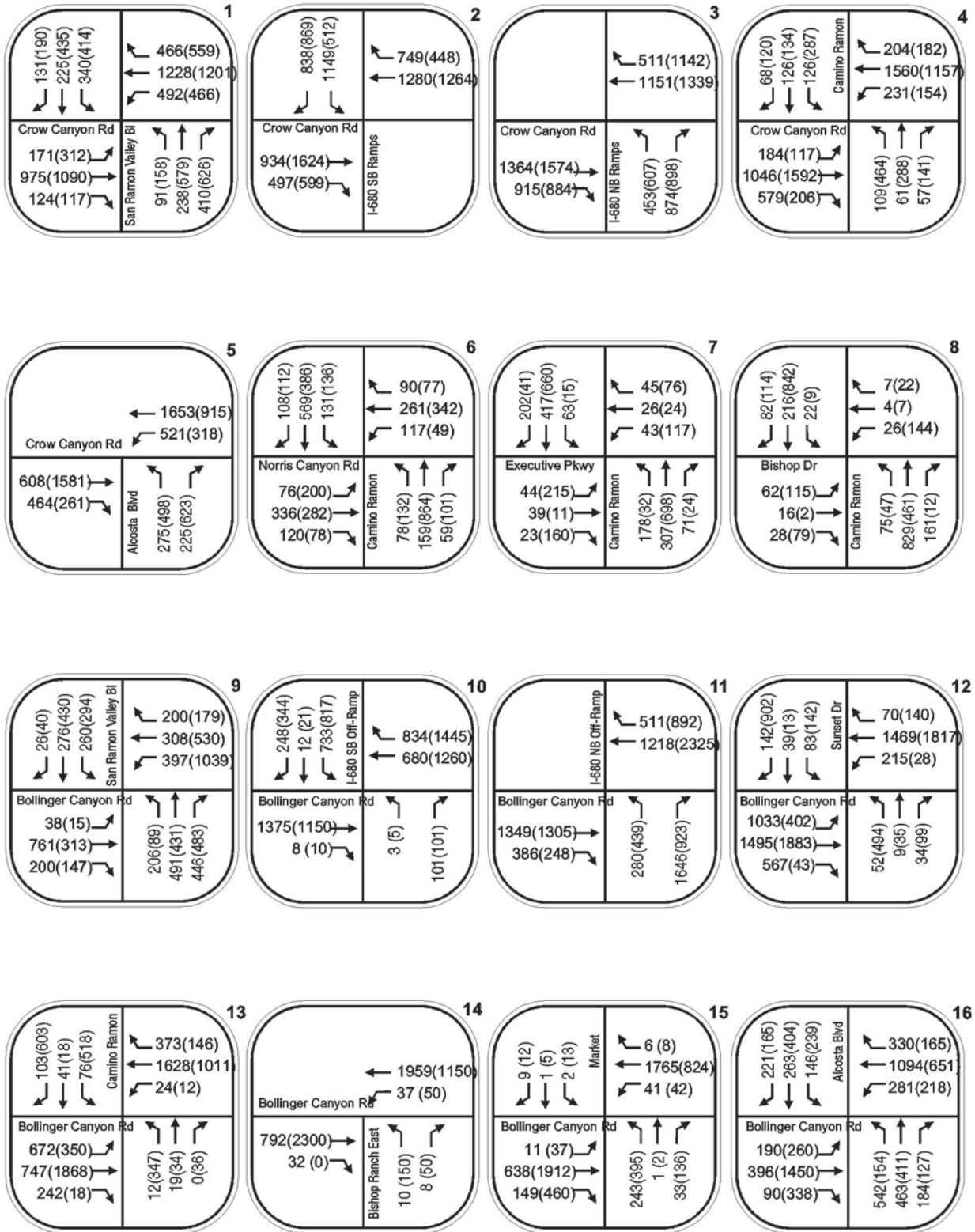
Existing Intersection Operations

Table 4.12-3 summarizes the existing traffic operations at the 29 existing intersections during the morning (AM) and afternoon (PM) peak hours for the study area intersections. The AM peak hour is between 7 a.m. and 9 a.m. and the PM peak hour is between 4 p.m. and 6 p.m. The existing volumes are shown in Exhibits 4.12-2a and 4.12-2b. The existing intersection geometry is shown in Exhibits 4.12-3a and 4.12-3b. As noted in the table, all intersections operate at LOS C or better during both peak hours—with the exception of the Bollinger Canyon Road/San Ramon Valley Boulevard, Bollinger Canyon Road/Alcosta Boulevard, and San Ramon Valley Boulevard/Montevideo Drive intersections, which operate at LOS D during the PM peak hour. Two existing intersections are evaluated qualitatively. Crow Canyon Road and Crow Canyon Place are expected to operate as well as Crow Canyon Road and Camino Ramon. Likewise, Crow Canyon Road and Twin Creeks Drive are expected to operate as well as, or better than, Crow Canyon Road and San Ramon Valley

Boulevard. The existing traffic operations are well within the City’s thresholds for acceptable operations.

Table 4.12-3: Existing Intersection Levels of Service

No.	Intersection	AM Peak Hour		PM Peak Hour	
		V/C Ratio	LOS	V/C Ratio	LOS
1	Crow Canyon Road/San Ramon Valley Boulevard	0.56	A	0.74	C
2	Crow Canyon Road/I-680 Southbound Ramps	0.59	A	0.57	A
3	Crow Canyon Road/I-680 Northbound Ramps	0.52	A	0.60	A
4	Crow Canyon Road/Camino Ramon	0.57	A	0.76	C
5	Crow Canyon Road/Alcosta Boulevard	0.44	A	0.67	B
6	Camino Ramon/Norris Canyon Road	0.46	A	0.59	A
7	Camino Ramon/Executive Parkway	0.36	A	0.43	A
8	Camino Ramon/Bishop Drive	0.36	A	0.46	A
9	Bollinger Canyon Road/San Ramon Valley Boulevard	0.79	C	0.88	D
10	Bollinger Canyon Road/I-680 Southbound Ramps	0.50	A	0.57	A
11	Bollinger Canyon Road/I-680 Northbound Ramps	0.75	C	0.71	C
12	Bollinger Canyon Road/Sunset Drive/Chevron Park	0.66	B	0.68	B
13	Bollinger Canyon Road/Camino Ramon	0.56	A	0.74	C
14	Bollinger Canyon Road/Bishop Ranch 1 East	0.39	A	0.56	A
15	Bollinger Canyon Road/Market Place	0.45	A	0.54	A
16	Bollinger Canyon Road/Alcosta Boulevard	0.71	C	0.81	D
17	Alcosta Boulevard /Norris Canyon Road	0.40	A	0.43	A
18	San Ramon Valley Boulevard/Norris Canyon Road	0.55	A	0.55	A
19	Bollinger Canyon Road/Crow Canyon Road	0.46	A	0.45	A
20	Bollinger Canyon Road/Dougherty Road	0.50	A	0.47	A
21	San Ramon Valley Boulevard/Montevideo Drive	0.62	B	0.81	D
22	Alcosta Boulevard/Montevideo Drive	0.27	A	0.28	A
23	Crow Canyon Road/Dougherty Road	0.41	A	0.57	A
24	Alcosta Boulevard/Old Ranch Road	0.30	A	0.26	A
25	Old Ranch Road/Dougherty Road	0.64	B	0.37	A
26	Sunset Drive/Shops at Bishop Ranch	0.30	A	0.38	A
27	Bishop Drive/Sunset Drive	0.36	A	0.47	A
28	Bollinger Canyon Road/Norris Canyon Road	0.86*	C*	0.37*	B*



Source: DMJM HARRIS | AECOM, June 2007.

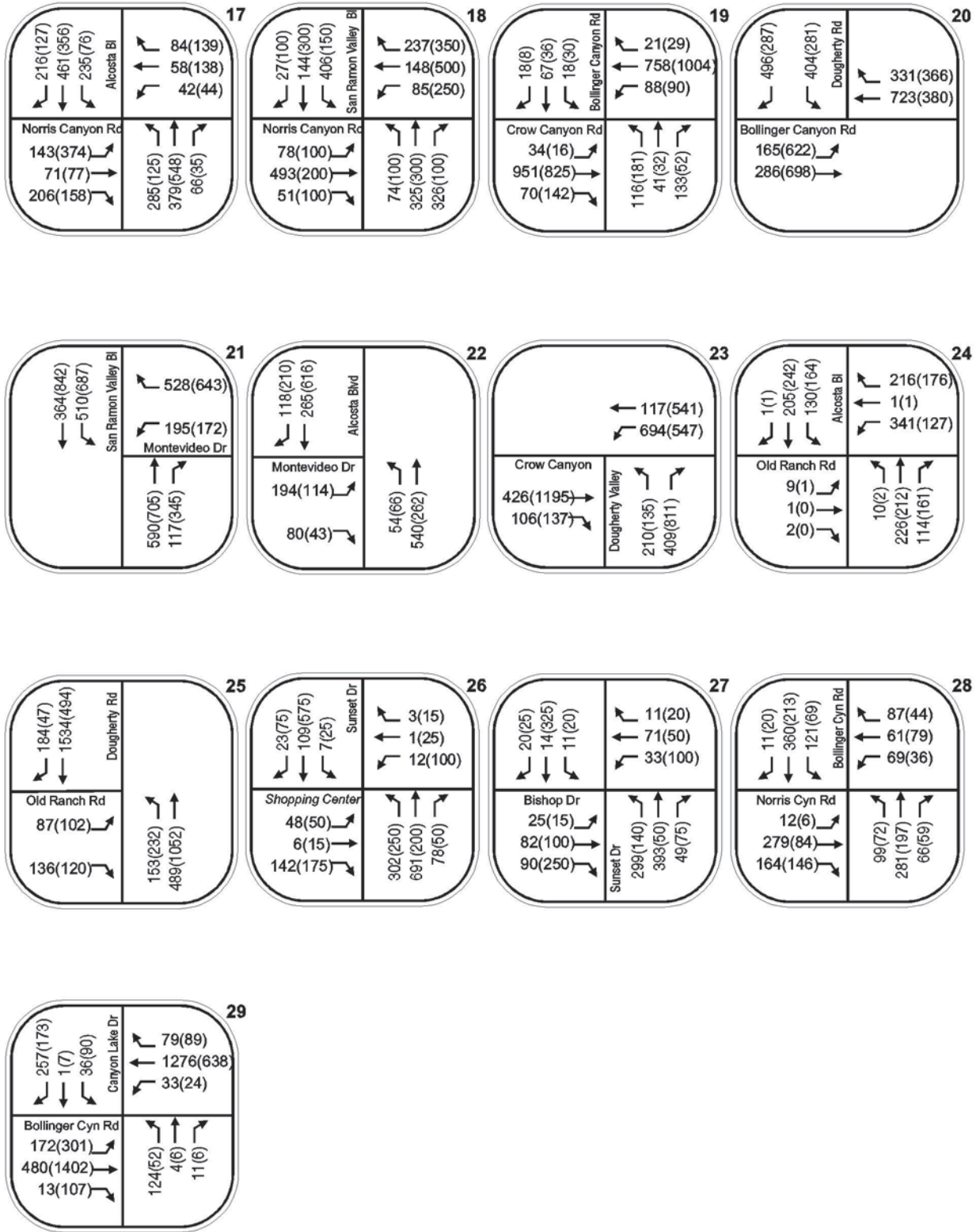


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Exhibit 4.12-2a Existing Traffic Volumes



Source: DMJM HARRIS | AECOM, June 2007.

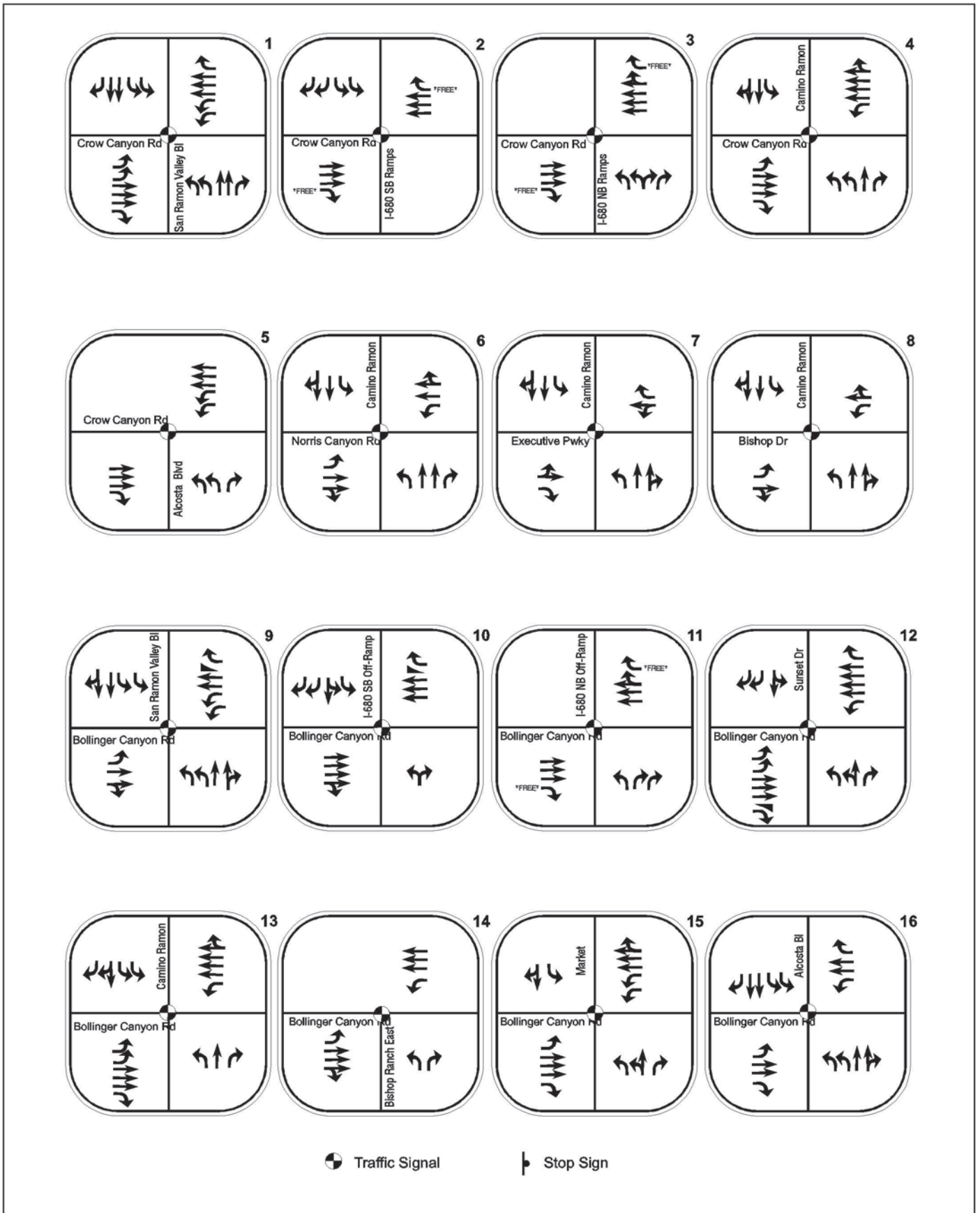


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Exhibit 4.12-2b Existing Traffic Volumes



Source: DMJM HARRIS | AECOM, June 2007.

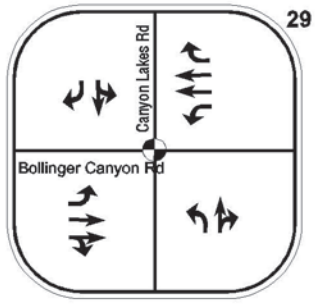
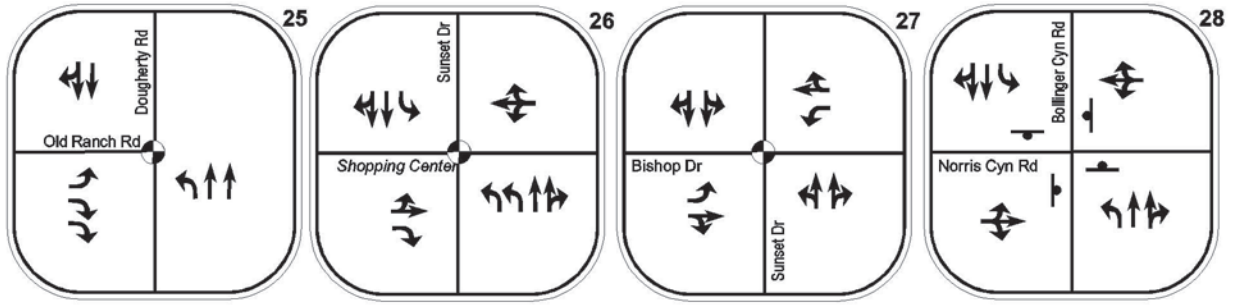
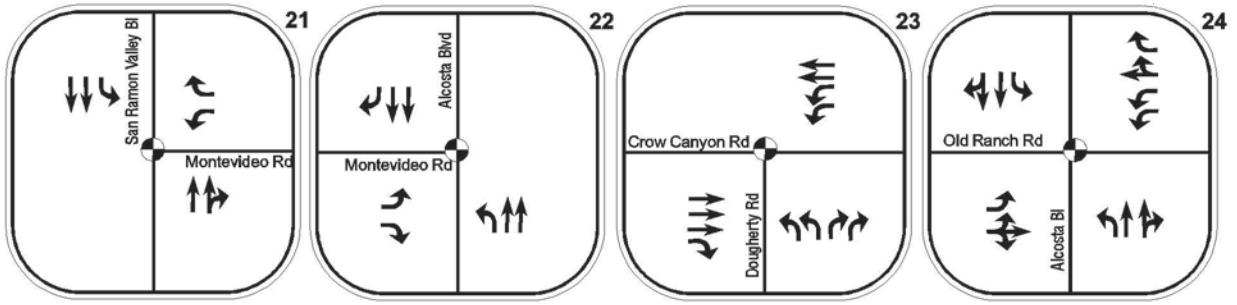
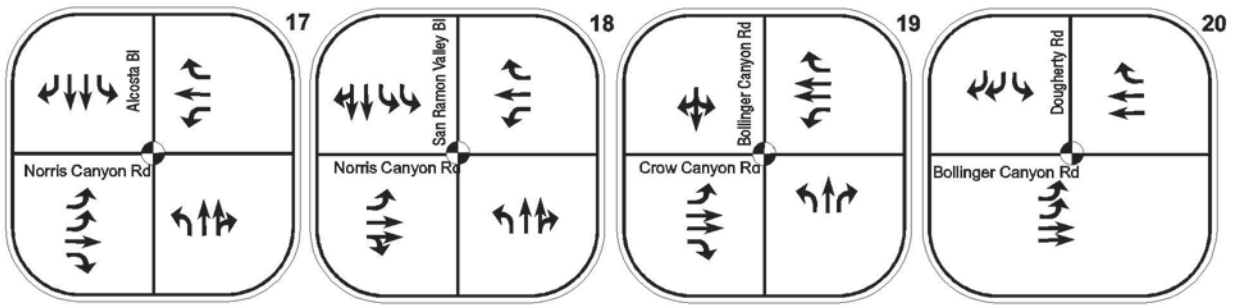


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Exhibit 4.12-3a Existing Intersection Geometries



 Traffic Signal
  Stop Sign

Source: DMJM HARRIS | AECOM, June 2007.



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Exhibit 4.12-3b Existing Intersection Geometries

Table 4.12-4 (Cont.): Freeway Level of Service Operations

Level of Service	Basic Freeway Segment	Merge and Diverge Areas
	Density Range (pc/mi/ln)	
B	> 11–18	> 10–20
C	> 18–26	> 20–28
D	> 26–35	> 28–35
E	> 35–45	> 35
F	> 45	Demand Exceeds Capacity

Notes:
pc/mi/hr = passenger cars per mile per hour
Source: Highway Capacity Manual, 2007.

The results of the existing freeway section analysis are provided in Table 4.12-5. The results of the ramp analysis are provided in Table 4.12-6. South of Bollinger Canyon Road, I-680 operates at level of service F in the southbound direction. South of Bollinger Canyon Road in the northbound direction, the section operates at LOS E. In both directions north of Bollinger Canyon Road, I-680 operates at LOS C and D. The Bollinger Canyon Road/I-680 ramps operate at level of service F in the AM peak hour except the northbound loop on-ramp, which operates at LOS C and the northbound on-ramp, which operates at LOS A. During the PM peak hour the southbound on ramps, both the diagonal and loop ramps operate at LOS F except for the northbound on-ramps, which operate at acceptable levels.

Table 4.12-5: Existing Freeway Section Level of Service

Interstate 680		Peak Hour	LOS	Density (pc/mi/hr)	Average Speed
Direction	Segment				
Northbound	South of Bollinger Canyon Road Interchange	AM	E	44.7	52.4
		PM	E	36.0	59.0
Southbound	South of Bollinger Canyon Road Interchange	AM	F	*	*
		PM	F	*	*
Northbound	North of Bollinger Canyon Road Interchange	AM	C	23.1	65.0
		PM	C	23.7	65.0
Southbound	North of Bollinger Canyon Road Interchange	AM	D	30.5	62.7
		PM	D	34.1	60.4

Notes:
pc/mi/hr = passenger cars per mile per hour
*Density and average speed are not determined for LOS F.
Source: DMJM Harris, 2007.

Table 4.12-6: Existing Freeway Ramp Level of Service

Interstate 680/Bollinger Canyon Road Interchange Ramp	AM Peak Hour		PM Peak Hour	
	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)
Northbound Off-Ramp	F	*	C	20.4
Southbound Off-Ramp	F	*	F	*
Southbound On-Ramp	F	*	F	*
Southbound On-Ramp (loop)	F	*	F	*
Northbound On-Ramp (loop)	C	27.9	C	26.3
Northbound On-Ramp**	A	V/C = 0.26	B	V/C = 0.45
Notes: pc/mi/hr = passenger cars per mile per hour * Density not determined for LOS F ** Only the volume capacity ratio (V/C) of the ramp is provided because of the auxiliary lane configuration. Source: DMJM Harris, 2007.				

Public Transportation

Bus Service

Central Contra Costa Transit Authority (County Connection) provides transit services in San Ramon, as well as other portions of central Contra Costa County. Exhibit 4.12-4 shows the existing transit services in the area. The project site is located about 0.4 mile south of the San Ramon Transit Center, which is located near the intersection of Executive Parkway and Camino Ramon, adjacent to the Iron Horse Trail. Several bus routes serve the transit center and the surrounding area, including Routes 121, 135, 221, 920, 960B, 960C, 970B, and 970C. The routes are briefly described below.

Route 121

Route 121 provides local service seven days a week throughout the San Ramon Valley, including the Study Area, between the Walnut Creek Bay Area Rapid Transit (BART) station and the Dublin/Pleasanton BART station. In San Ramon, Route 121 provides service along Camino Ramon and San Ramon Valley Boulevard (paralleling I-680) with deviations along Crow Canyon Road, Bollinger Canyon, Bishop Ranch Business Park and the San Ramon Transit Center. Weekday frequencies on Route 121 are approximately every 30 minutes during peak hours and every 60 minutes during midday and evening hours. Weekend frequencies are every hour. Weekday service begins on Route 121 at approximately 5:15 a.m. and ends at approximately midnight. Saturday service begins at approximately 7:00 a.m. and runs until 10:30 p.m. Sunday service begins at approximately 8:40 a.m. and ends at 6:30 p.m. Employees of businesses that belong to the Bishop Ranch Transportation Association ride free on Route 121 with an Express Pass.

Route 135

Route 135 provides service between the San Ramon Transit Center and Dublin/Pleasanton BART station via Bollinger Canyon Road and the Dougherty Valley from 6 a.m. to 7 p.m. on weekdays only. During the peak hour, service is provided every 20 minutes and the off-peak hours service is

provide every 45 minutes. In addition to a stop at the San Ramon Transit Center, the route includes stops at Sunset Drive and Bollinger Canyon Road at the Market Place. Employees of businesses that belong to the Bishop Ranch Transportation Association ride free on Route 135 with an Express Pass.

Route 221

Route 221 provides limited peak hour service on weekdays between Alamo and San Ramon. In San Ramon, service is provided on Crow Canyon Road (east of I-680), San Ramon Valley Boulevard (between Crow Canyon Road and Norris Canyon Road) and Annabel Lane in Bishop Ranch. Select trips also travel south of Annabel Lane to serve the San Ramon Transit Center, Alcosta Boulevard, Montevideo Drive and Broadmoor Drive. Morning service on Route 221 begins at approximately 6:00 AM and ends at 8:00 AM. Afternoon service begins at approximately 2:30 PM and ends at 4:00 PM.

Route 920

Route 920 operates on weekdays between Walnut Creek (Mitchell Drive park-and-ride lot) and the Altamont Commuter Express (ACE) station in Pleasanton, and from the ACE station to Bishop Ranch. The service runs five times (twice in the morning and three times in the evening) in the southbound direction and six times (three times each in the morning and evening) in the northbound direction. Near the project site, the route stops at the San Ramon Transit Center, at the stop located eastbound at Chevron Park, at eastbound Bishop Ranch 1 south of Bollinger Canyon Road near Camino Ramon, and at the AT&T campus, depending on the direction of travel and peak hour. Employees of businesses that belong to the Bishop Ranch Transportation Association ride free on Route 920 with an Express Pass.

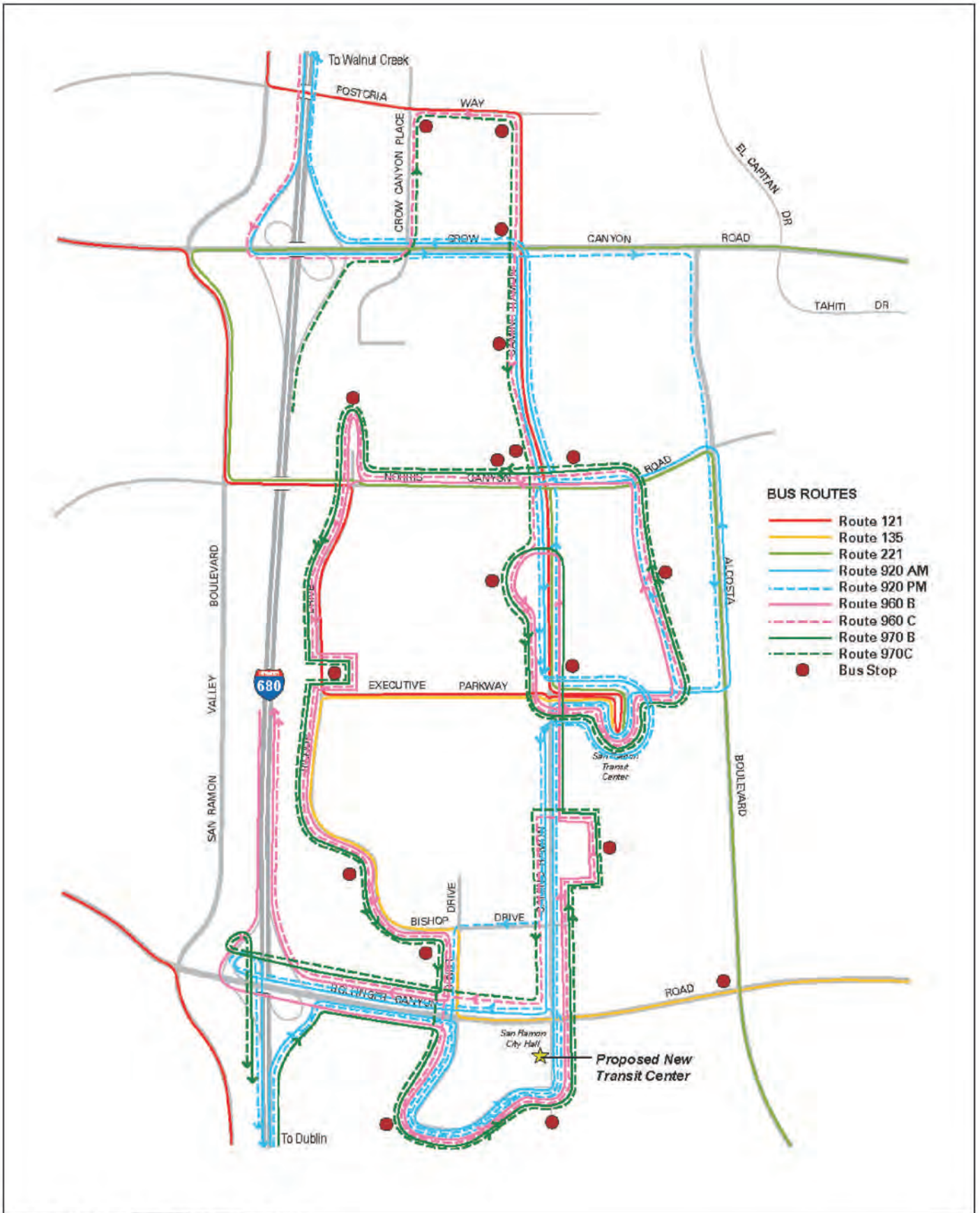
Routes 960 B/C and 970 B/C

Routes 960 B/C and 970 B/C provide express bus service between the Bishop Ranch Business Park and BART stations as part of a long-standing financial agreement between the Bishop Ranch Transportation Association (comprised of Sunset Development, Chevron Corporation, and Marriott International). Routes 960 B/C and 970 B/C provide service for commuters traveling to and from the Bishop Ranch Business Park, and Walnut Creek BART station and the Dublin/Pleasanton BART station, respectively. During the peak hours, service is provided every 15-20 minutes and the off-peak hour's service is provided every 45 minutes. Service is designed to meet every peak hour BART train in the AM and PM hours, beginning at 6:00 a.m. and ending at approximately 8:00 p.m. Employees of businesses that belong to the Bishop Ranch Transportation Association ride free on Route 960 B/C and 970 B/C with an Express Pass.

Bicycles

The Contra Costa Comprehensive Countywide Transportation Plan includes pedestrian and bicycle facilities as an important part of meeting the diverse needs of Contra Costa County.

Bicycle systems are generally classified using the following classes of bicycle facilities:



Source: DMJM HARRIS | AECOM, June 2007.



Not to Scale

Michael Brandman Associates

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Exhibit 4.12-4 Existing Transit Service

- Class I (bike path) provides exclusive right-of-way for bicyclists and pedestrians, with cross flows of motorists minimized.
- Class II (bike lane) provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles, with through travel by motor vehicles or pedestrians prohibited but with vehicle parking and cross flows by pedestrians and motorists permitted.
- Class III (bike route) provides a right-of-way, designated by signs or permanent markings, that is shared by pedestrians and motorists.

Table 4.12-7 provides a summary of bicycle facilities in central San Ramon. The most notable dedicated bicycle facility is the Iron Horse Trail, which is a 24.47-mile Class I facility extending from Pleasanton to Concord along the former San Ramon Branch Line right-of-way owned by the County of Contra Costa. Near the project site, Class II facilities, or bike lanes, exist west of Sunset Drive on Bishop Drive, on Alcosta Boulevard, and on San Ramon Valley Boulevard. Bollinger Canyon Road west of San Ramon Valley Boulevard also has Class II bike lanes. East of San Ramon Valley Boulevard, Bollinger Canyon Road becomes a Class III bicycle facility and extends on the south curb of Bollinger Canyon Road to the Iron Horse Trail. Exhibit 4.12-5 shows the existing bicycle transportation network near the planned project site.

Table 4.12-7: San Ramon Bicycle Facilities

Class	Roadway/Trail	Segment
I	Iron Horse Trail	Entire length of City; trail extends from Pleasanton to Concord (24.47 miles).
I	Cross Valley Trail	Del Mar Drive to Tareyton Avenue.
II	Crow Canyon Road	Alcosta Boulevard to eastern City limits; bike lanes continue into Danville.
II	San Ramon Valley Boulevard	Entire length of City; bike lanes continue into Danville and Dublin.
II	Norris Canyon Road	San Ramon Valley Boulevard to Alcosta Boulevard.
II	Alcosta Boulevard	Crow Canyon Road to Veracruz Drive.
II	Bollinger Canyon Road	Norris Canyon Road to San Ramon Valley Boulevard.
II	Bollinger Canyon Road	Canyon Lakes Drive to Dougherty Road.
III	Norris Canyon Road	San Ramon Valley Boulevard to Bollinger Canyon Road.
III	Bollinger Canyon Road	San Ramon Valley Boulevard to Alcosta Boulevard.
III	Montevideo Drive	San Ramon Valley Boulevard to Alcosta Boulevard.
III	Alcosta Boulevard	Veracruz Drive to San Ramon Valley Boulevard
III	Broadmoor Drive	Montevideo Drive to Alcosta Boulevard.
III	Davona Drive	Montevideo Drive to Alcosta Boulevard.

Source: Michael Brandman Associates, 2007.

Pedestrians

Below is a summary of existing sidewalks and paths in the project vicinity. Exhibit 4.12-6 shows the pedestrian facilities at the intersections near the project site.

Bollinger Canyon Road

A sidewalk is present along the south side of Bollinger Canyon Road from the Chevron Park entrance to Alcosta Boulevard. On the north side of the roadway, a sidewalk exists between Central Park and Camino Ramon; there is no sidewalk along the Bishop Ranch 2 frontage. Sidewalks on the north and south side of Bollinger Canyon Road connect with the Iron Horse Trail.

The intersection of Bollinger Canyon Road and Camino Ramon/Bishop Ranch 1 entrance road has crosswalks across the west, north, and south legs. The Bollinger Canyon Road intersections with Bishop Ranch 1 East road and Sunset Drive/Chevron Park have crosswalks only across their east and south legs.

Camino Ramon

A sidewalk is present along the east side of Camino Ramon between Bollinger Canyon Road and Bishop Ranch 3. On the west side of the roadway, a meandering sidewalk extends from Norris Canyon Road to Bishop Drive; there is no sidewalk along the Bishop Ranch 2 frontage. All legs of the Camino Ramon intersection with Bishop Drive have pedestrian crosswalks.

Bishop Drive

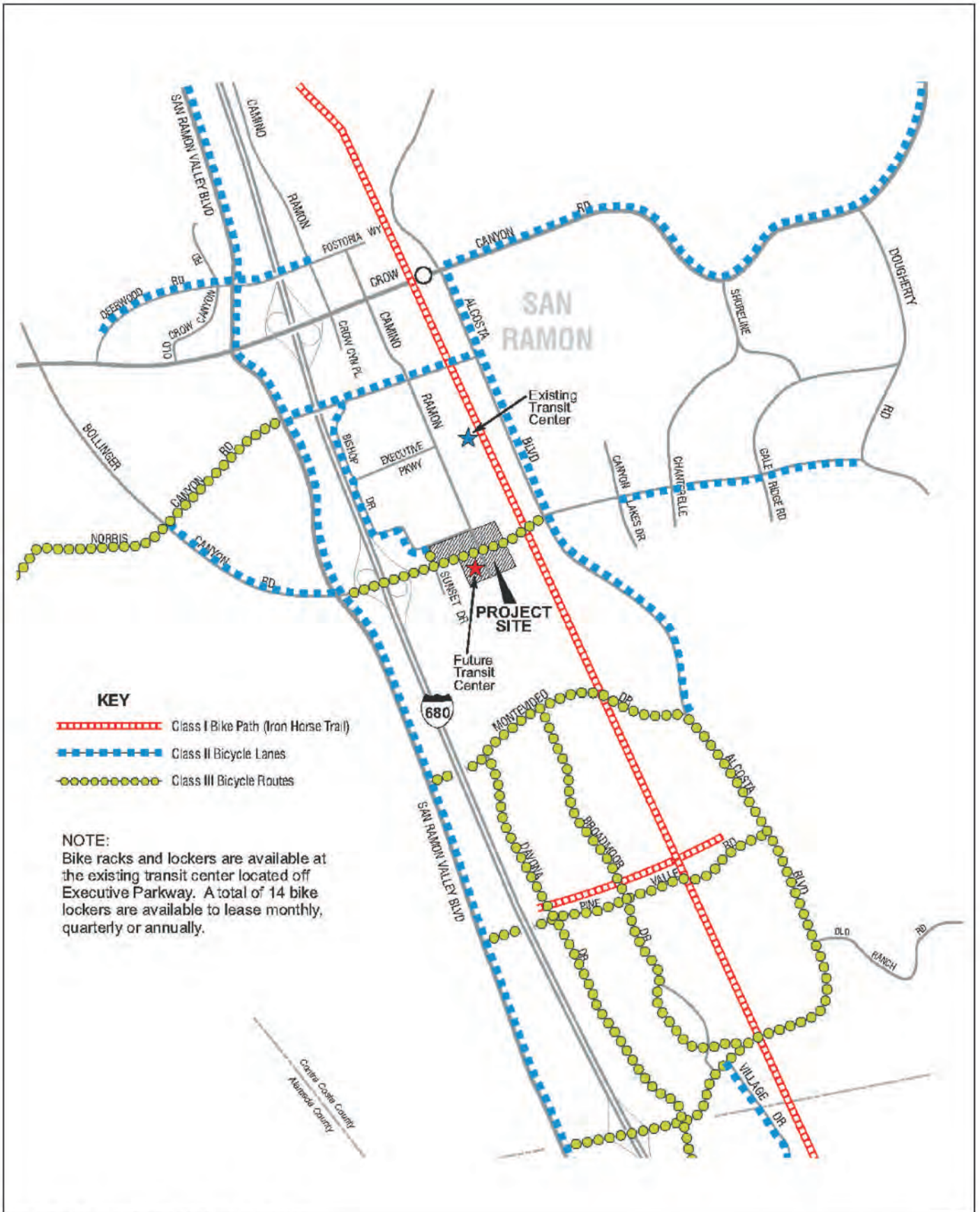
A meandering dirt path is located along the north side of the roadway between Camino Ramon and Executive Parkway. This dirt path includes a par course. A short segment of sidewalk is located along the south side of the roadway between Camino Ramon and a Bishop Ranch 2 driveway; however, it does not extend the full length of the Bishop Ranch 2 frontage. All legs of the Bishop Drive intersection with Sunset Drive have pedestrian crosswalks.

Sunset Drive

A sidewalk is present along the east side of Sunset Drive between Bollinger Canyon Road and Bishop Drive along the Bishop Ranch 2 frontage. On the west side, a sidewalk extends between the Shops at Bishop Ranch entrance and Bishop Drive; no sidewalk is present between Bollinger Canyon Road and the Shops at Bishop Ranch entrance. All legs of the Sunset Drive intersection with the Shops at Bishop Ranch/Bishop Ranch 2 entrance have pedestrian crosswalks.

Bishop Ranch 1 Entrance Road

Sidewalks are present on both sides of the Bishop Ranch 1 entrance road and extend between Bollinger Canyon Road and the Bishop Ranch 1 office complex.

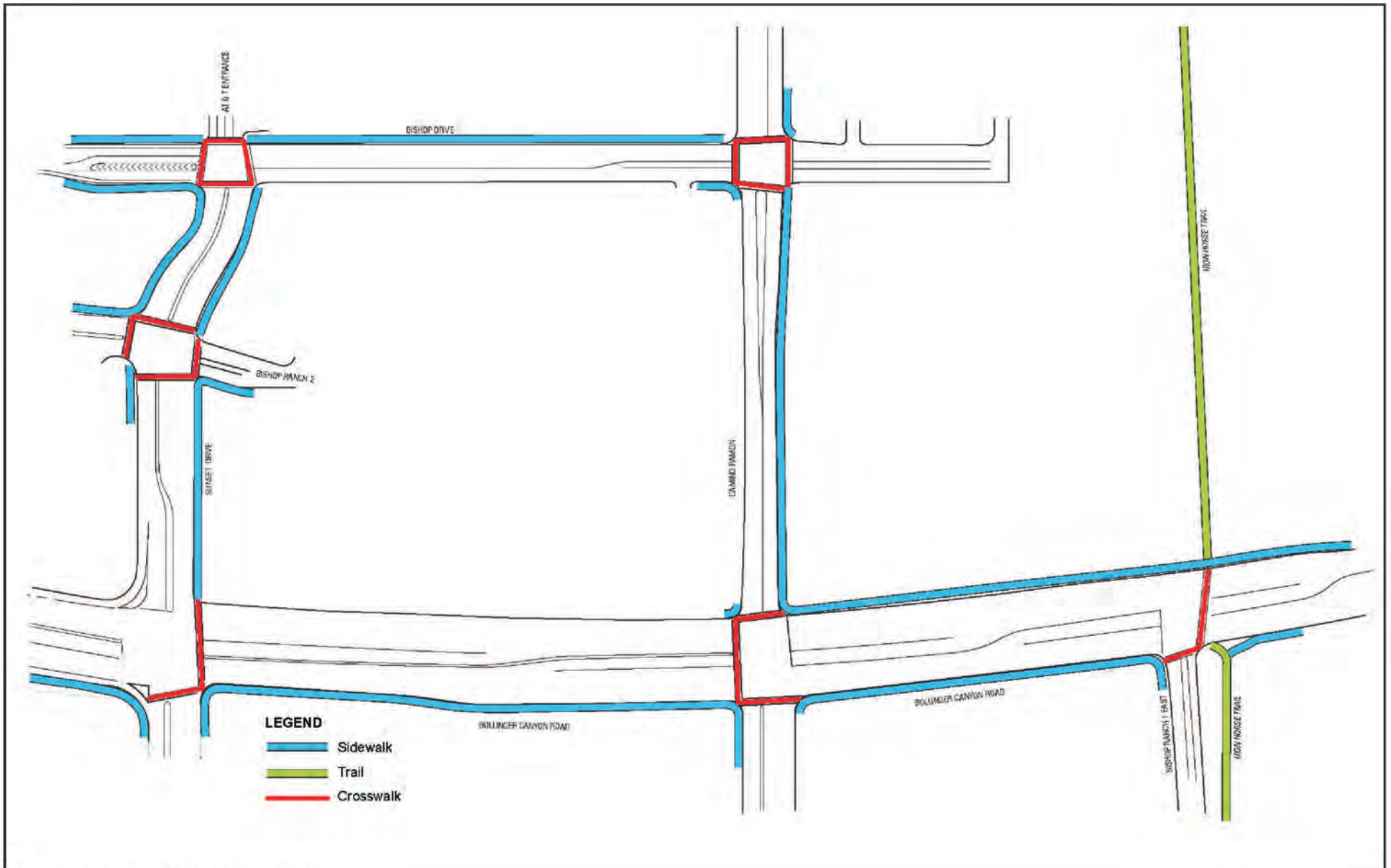


Source: DMJM HARRIS | AECOM, June 2007.



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Exhibit 4.12-5 Bicycle Facilities



Source: DMJM HARRIS | AECOM, June 2007.



Michael Brandman Associates

24910007 • 06/2007 | 4.12-6_ped_facilities.cdr

Exhibit 4.12-6 Pedestrian Facilities

Bishop Ranch 1 East Road

A sidewalk extends along the full length of the west side of the Bishop Ranch 1 East road. No sidewalk is present on the east side of the road. There are crosswalks linking the sidewalk with the Iron Horse Trail.

Transportation Demand Management

Transportation Demand Management (TDM) is a series of measures promoting alternatives to the single-occupant vehicle for reducing traffic congestion and improving air quality by maximizing the use of the existing transportation infrastructure. These measures include carpooling, vanpooling, transit, walking, bicycling, telecommuting, and compressed workweeks.

The City of San Ramon's TDM program was originally established in 1989. Over the years, the program has evolved into one of three regional TDM programs known as 511 Contra Costa. The City provides administrative oversight and implements the 511 Southern Contra Costa County TDM programs. The primary goal of the City's Employer TDM program is to reduce traffic congestion and improve air quality through the reduction of work-related car trips.

As part of this endeavor, the City facilitates a TDM Advisory Committee, which is responsible for the following:

- Coordinating and monitoring the implementation of the regional and Citywide TDM efforts in order to achieve reductions in employment-related, single-occupant vehicle traffic.
- Providing recommendations to the City Council regarding improvements in City services and facilities to assist employers in reducing single-occupant vehicles.
- Developing and implementing commute alternative programs in concert with 511 Contra Costa and the Contra Costa Transportation Authority.
- Coordinating TDM efforts with all employers and complexes in the City.
- Coordinating TDM efforts with local and regional agencies as designated by the City.
- Serving as liaison between the City and business community.

The Bishop Ranch Transportation Association has been an active member of the City's TDM program since the program's inception. Bishop Ranch has been recognized multiple times at the local, regional, State, and federal levels for its leadership and contribution to reducing the number of single-occupant vehicles and for encouraging commuters to carpool, ride transit, vanpool, walk, and bicycle to work.

Bishop Ranch also continues to create and implement unique, creative, and successful TDM strategies that improve air quality by significantly reducing traffic congestion. Since 1989, the City has collected data related to commute patterns from businesses throughout the City, including the Bishop

Ranch Business Park. Over the years, the survey data has included information and survey results from Bishop Ranch Business Park and the City of San Ramon. The most recent survey in 2006, which had a response rate of 38 percent, found that 24.3 percent of Bishop Ranch employees used an alternative form of transportation instead of driving alone. The survey results are below:

- Drive alone: 68.8 percent
- Carpool: 9.5 percent
- Vanpool: 3.3 percent
- Bus: 2.5 percent
- BART and bus: 2.4 percent
- Telecommute: 2.2 percent
- Compressed day off: 1.7 percent
- ACE: 0.9 percent
- Bicycle: 1.2 percent
- Motorcycle: 0.6 percent
- Walk: 0.6 percent

Note that responses were not available for the remaining 6.3 percent of those surveyed.

4.12.3 - Regulatory Framework

State

Caltrans

Caltrans' established performance standard for all state highway facilities is the transition between LOS C and D. If a state highway facility operates below the transition between LOS C and D, the Caltrans' threshold is to maintain the lower level of service.

Local

City of San Ramon

The City of San Ramon has several standards related to transportation. Each is discussed separately.

Intersection Operations

Thresholds of significance relate to the City's policies regarding traffic circulation, bicycle and pedestrian circulation, and transit service. According to the General Plan, traffic service criteria are quantifiable, but the pedestrian, bicycle, and transit service criteria are qualitative and are intended to provide a basis against which to evaluate the City's policies for these modes of travel. A proposed development project would have significant impacts on the transportation system if it would:

- Cause a study intersection to exceed the City's standard of level of service C, with level of service D (volume-to-capacity ratio less than or equal to 0.90) for no more than 3 hours of the day (a.m., noon, and p.m. peak hours). This criterion is consistent with, and slightly more

stringent than, the CCTA Transportation Service Objective for intersections on Routes of Regional Significance.

- Fail to provide for reasonably efficient pedestrian and bicycle circulation, through the implementation of City standards and the General Plan's proposed bicycle and trail network or General Plan policies related to pedestrian and bicycle circulation.
- Create a condition, either by design or by the generation of traffic, that provides a barrier to, or unsafe condition for, pedestrian and bicycle circulation.
- Create a transit demand that would exceed currently planned transit service.

In addition to the General Plan policies establishing standards of significance, the City entered into the Dougherty Valley Settlement Agreement that defines specific traffic performance requirements to minimize the impact to Bishop Ranch employees and visitors. These requirements are consistent with General Plan policies:

- Strive to maintain traffic LOS C or better as the standard at all intersections, with level of service D during no more than three hours of the day for the morning, noon, and afternoon peak hours.
- Accept LOS D during 2-hour peak periods, with the possibility of intersections at or closely approximating the limits of LOS D only on arterial routes bordered by non-residential development, where improvements to meet the City's standard would be prohibitively costly or disruptive.

The agreement stipulates that the City of San Ramon shall not change or approve land use designations, densities, or circulation systems in the City's outlying areas if they would cause (unless mitigated) the General Plan traffic service standards to be exceeded on the following streets and specific intersections:

- Bollinger Canyon Road from San Ramon Valley Boulevard to Alcosta Boulevard
- Camino Ramon from Bollinger Canyon Road to Crow Canyon Road
- Norris Canyon Road from San Ramon Valley Boulevard to Alcosta Boulevard
- Bollinger Canyon Road at Alcosta Boulevard, Camino Ramon, Sunset Drive, and San Ramon Valley Boulevard
- Camino Ramon at Bishop Drive and Executive Parkway
- Norris Canyon Road at Alcosta Boulevard, Camino Ramon, Bishop Drive, and San Ramon Valley Boulevard

To ensure that the intersection performance standards are met, the City conducts an assessment based on an annual intersection monitoring program. The results of the monitoring program trigger the need to implement Capital Improvement Projects to improve intersection LOS. The monitoring program allows required intersection improvements to be implemented as the need arises.

Parking Requirements

The City of San Ramon Zoning Ordinance establishes basic parking requirements based on type of use. The following off-street vehicular parking requirements by land use type form the basis for the shared use parking concept established for the project:

- **Multi-family residential:** 1 space/1-bedroom unit; 2 spaces/2- and 3-bedroom unit
- **Retail:** 1 space/250 square feet
- **Cinema:** 1 space/4 seats
- **Hotel:** 1.2 spaces/room
- **Office:** 4 spaces/1,000 square feet
- **Library:** 3 spaces/1,000 square feet

Because the project is a mixed-use project, there is an assumption that certain uses will share parking spaces based on unique operational characteristics and peak use timeframes. The specific breakdown of parking spaces throughout the project will continue to be refined as the building programming is finalized. Motorcycle and bicycle parking will also be provided throughout the project to encourage alternative means of transportation and comply with local regulations

4.12.4 - Methodology

Analysis in this section was based on the Traffic Operations Evaluation prepared by DMJM Harris in June 2007. Four analysis scenarios are included in the traffic operations analysis. These scenarios are as follows:

- **Existing Conditions:** This scenario reflects traffic counts that were conducted between May 2006 and February 2007.
- **Existing Plus Project Conditions:** This scenario adds project-generated trips from the flex retail condition to existing traffic conditions.
- **Year 2020 Conditions:** This scenario represents Year 2020 traffic conditions modeled by the Contra Costa Transportation Authority Countywide Travel Demand Model. The traffic model assumes that the City of San Ramon General Plan will be built out by 2020, providing for a conservative analysis.
- **Year 2020 Plus Project Conditions:** This scenario adds project-generated trips from the flex retail condition to Year 2020 traffic conditions.

The Traffic Operations Evaluation was prepared based on discussions with, and criteria set forth by, the City of San Ramon and Caltrans. The City identified the intersections that are evaluated in the Traffic Operations Evaluation. Intersection impacts were modeled using Traffix software, which is based on the methodology contained in the 2000 Highway Capacity Manual.

The Traffic Operations Evaluation also considered impacts on freeway mainline and ramp segments on I-680 near Bollinger Canyon Road. The freeway analysis was conducted using 2000 Highway Capacity Manual software.

Project queuing was also evaluated under Year 2020 conditions in the Traffic Operations Evaluation.

4.12.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to transportation are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- b.) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- c.) 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? (Refer to Section 7, Effects Found Not To Be Significant.)
- d.) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e.) Result in inadequate emergency access?
- f.) Result in inadequate parking capacity?
- g.) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

4.12.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Analysis of Intersection Operation Impacts

Impacts TRANS-1 and TRANS-2 analyze the proposed project's impacts on intersection operations. Both impacts rely on the proposed project's trip generation rates, trip distribution pattern, and planned

improvements to the transportation network. For presentation purposes, the projections are summarized below. Note that Existing Plus Project conditions represent 2010.

Trip Generation

The addition of more than 2.1 million square feet of mixed uses (approximately 1.6 million-square foot-increase over existing vested entitlements) would add new trips to local roadways. Trip generation of the proposed development was calculated using statistics from the Institute of Transportation Engineers and the Civic Center traffic report prepared for the City of San Ramon. The ITE publication Trip Generation, 7th Edition, was used to determine the trip rates for the project. Because the Plaza District contains 50,142 square feet of flex retail/office (space that could be used for either purpose), it was assumed that all of this square footage would be retail, which generates more trips per square foot than office, and, therefore, represents a worst-case scenario. Table 4.12-8 provides the trip generation rates for the proposed project’s uses, using the flex retail scenario.

Table 4.12-8: Trip Generation Rates - Flex Retail

Description	ITE Code	Trip Generation Units	Trip Generation Rates						Daily
			AM			PM			
			In	Out	Total	In	Out	Total	
Condo	230	Per unit	0.07	0.36	0.44	0.35	0.17	0.52	5.06
Hotel	310	Per room	0.34	0.22	0.56	0.31	0.28	0.59	6.74
Retail	820	Per 1000 sq ft	0.45	0.29	0.73	1.58	1.71	3.29	35.02
Cinema	444	Per screen	—	—	—	8.09	12.13	20.22	58.06
Office Park	750	Per 1000 sq ft	1.42	0.18	1.59	0.19	1.17	1.37	11.02
Library ²	*	Per 1000 sq ft	0.70	0.30	1.00	2.50	2.50	5.00	39.75
City Hall ²	*	Per 1000 sq ft	2.43	0.27	2.70	1.08	2.52	3.60	61.25

Notes:
 Cinema trip generation is assumed for a Friday.
 Trip generation for the library and City Hall are based on the Civic Center Report. Daily trip rates at the library and City Hall were based on the ratio of the average AM/PM peak hour from the Civic Center Report to the ITE Trip Generation for library and government office building. The ratio was multiplied by the ITE Trip Generation daily rate for the library and government office building, respectively, to determine an appropriate daily rate consistent with the Civic Center Report.
 Source: DMJM Harris, 2007.

Reductions to the standard trip generation rates have been made to reflect how the project will actually generate traffic once it is built and occupied. Two types of reductions have been made. First, reductions have been made that are based on the interaction between the various land uses of the project. Second, percentage reductions have been taken into account for proximity to the proposed transit center, pass-by traffic that would otherwise remain on the roadway network, and

travel demand management programs that are in place in the Bishop Ranch Business Park. Pass-by trips are trips passing by on adjacent streets and stopping at the project as an intermediate stop between the origin and destination.

For internal trip reductions, adjustments were made to the retail, office park, condominium, and hotel land use trip generations based on the ITE methodology for determining the internal capture associated with multi-use development. The calculation sheets are included in Appendix I. Retail, office park, condominium, and hotel were assumed to generate internal trips at the proposed project. Guests at the hotel are expected to use the adjacent retail services and interact with the adjacent office space similar to residents in the condominium units. The internal trips were subtracted from the single-use trip generation estimate to determine the external trips for each land use. Additional percentage-based reductions were made, and these reductions were applied to the external trips, not the single-use trip generation estimate.

The additional percentage-based reductions include proximity to the proposed transit center, retail pass-by trips, transportation demand management (TDM), and a PM walk mode. A 2-percent reduction was made for the condominiums and hotel for residential development near a major transit facility, and a 2-percent reduction of the office trip generation was made for employment near a major transit facility. These reductions were adapted from the Santa Clara County Congestion Management Plan for development within 2,000 feet of a major bus stop. Data was adapted from Santa Clara County in the absence of any guidelines from Contra Costa County. The retail pass-by trip reduction was based on the fitted curve equation from the ITE pass-by methodology. The TDM reduction of 15 percent is based on historic data from the City and the Bishop Ranch Business Park TDM programs.

Two reductions were made for City Hall and library. A transit/TDM reduction of 10 percent was made for City Hall, and library PM peak-hour traffic was reduced by 25 percent for walking. These percentages are consistent with the prior environmental review for these projects in 2003.

The amount of traffic expected to be generated by the 488 planned condominiums would be 173 trips in the AM peak hour, 150 trips in the PM peak hour, and 1,525 daily trips. Reductions for internal trips and the 2-percent transit center reduction were assumed in this forecast.

The amount of traffic expected from the hotel would be 55 trips in the AM peak hour, 57 trips in the PM peak hour, and 703 daily trips. Reductions for internal trips and the 2-percent transit center reduction were assumed.

The retail component would generate 331 trips in the AM peak hour, 1,568 trips in the PM peak hour, and 16,487 daily trips. An internal trip reduction was applied. The external retail traffic was also reduced by 22 percent to account for pass-by traffic. The 22-percent adjustment was applied to the daily traffic, as well as the AM peak-hour outbound traffic and the PM peak-hour inbound traffic, which are the non-peak directions during the peak commuter hours. No TDM or transit center

Transportation

reduction was applied to the traffic forecast for the retail component of the project. The six-screen cinema is not expected to generate trips during the AM peak hour but will generate 121 trips during the PM peak hour and 348 daily trips. No reduction was made to the cinema-generated traffic. The 681,770 square-foot Bishop Ranch 1A office park is expected to generate 891 trips in the AM peak hour, 724 trips in the PM peak hour, and 5,516 daily trips. During the AM peak hour, the majority of these trips—89 percent—would be inbound. During the PM peak hour, the majority of the office trips—86 percent—would be outbound. An internal trip reduction was applied. The external trips were reduced by 15 percent to reflect the successful TDM program in place within the Bishop Ranch Business Park. In addition, a 2-percent reduction has been assumed for the proposed transit center.

The amount of traffic expected from the library would be 36 trips in the AM peak hour, 133 trips in the PM peak hour, and 1,405 daily trips. During the AM peak hour, 70 percent of these trips would be inbound, and during the PM peak hour, the directional distribution would be evenly split.

The total PM peak-hour trip generation has been reduced by 25 percent to reflect the anticipated number of people who would walk to the library during this period. The amount of traffic expected from City Hall would be 183 trips in the AM peak hour, 243 trips in the PM peak hour, and 4,143 daily trips. During the AM peak hour, 90 percent of these trips would be inbound, and during the PM peak hour, 70 percent of these trips would be outbound. The total trip generation has been reduced by 10 percent to reflect the successful TDM program in place within the Bishop Ranch Business Park. The trip generation rates and the trip reduction assumptions for the library and City Hall are consistent with the City Civic Center traffic report completed in 2003.

Table 4.12-9 provides trip generation totals for the proposed project after trip reduction rates are applied.

Table 4.12-9: Trip Generation Totals - Flex Retail

Description	Size	Trips						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Condo	487 units	37	178	215	170	84	254	2,469
Internal Trip Adjustments		-11	-27	-38	-56	-45	-101	-913
External Trips		26	151	177	114	39	153	1,556
Transit Center								
Reduction (2%)		-1	-3	-4	-2	-1	-3	-31
Net New Trips		25	148	173	112	38	150	1,525
Hotel	169 rooms	58	37	95	53	47	100	1,139
Internal Trip Adjustments		-19	-20	-39	-17	-25	-42	-422
External Trips		39	17	56	36	22	58	717
Transit Center								
Reduction (2%)		-1	0	-1	-1	0	-1	-14
Net New Trips		38	17	55	35	21	57	703

Table 4.12-9 (Cont.): Trip Generation Totals - Flex Retail

Description	Size	Trips						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Retail	663,340	297	190	487	1,048	1,135	2,182	23,231
Internal Trip Adjustment	square	-53	-35	-88	-91	-103	-194	-2,094
External Trips	feet	244	155	399	957	1,032	1,988	21,137
Retail Pass-by Reduction (22%)		-34	-34	-68	-210	-210	-421	-4,650
Net New Trips		210	121	331	746	821	1,568	16,487
Cinema	6 screens	—	—	—	49	73	121	348
Office Park	681,770	967	120	1,087	130	801	931	7,513
Internal Trip Adjustment	square	-6	-8	-14	-34	-25	-59	-867
External Trips	feet	961	112	1,073	96	776	872	6,646
Transportation Demand Management Reduction (15%)		-144	-17	-161	-14	-116	-131	-997
Transit Center Reduction (2%)		-19	-2	-21	-2	-16	-17	-133
Net New Trips		798	93	891	80	644	724	5,516
Library	35,340	25	11	36	88	88	177	1,405
Afternoon Walk Mode Reduction (25%)	square	—	—	—	-22	-22	-44	0
Net New Trips	feet	25	11	36	66	66	133	1,405
City Hall	75,150	183	20	203	81	189	271	4,603
Transit/TDM Reduction (10%)	square	-18	-2	-20	-8	-19	-27	-460
Net New Trips	feet	165	18	183	73	170	243	4,143
Total New Trips Without Adjustments	—	1,566	556	2,122	1,619	2,417	4,035	40,709
Total New Trips with Adjustments	—	1,261	407	1,668	1,161	1,834	2,995	30,127
Notes:								
For the retail pass-by trip reduction, the ITE pass-by trip percentage equation was used for the PM peak period and applied this percentage to the AM peak hour outbound and PM peak hour inbound, with the same number of inbound and outbound pass-by trips during each peak hour.								
An internal traffic reduction was applied to condominium, hotel, retail, and office park based on the ITE methodology.								
Condominium, hotel, and office traffic is reduced by 2 percent to reflect the new location of the transit center.								
Office traffic is reduced by 15 percent and City Hall by 10 percent to reflect the existing TDM program.								
Source: DMJM Harris, 2007.								

Office Trip Generation

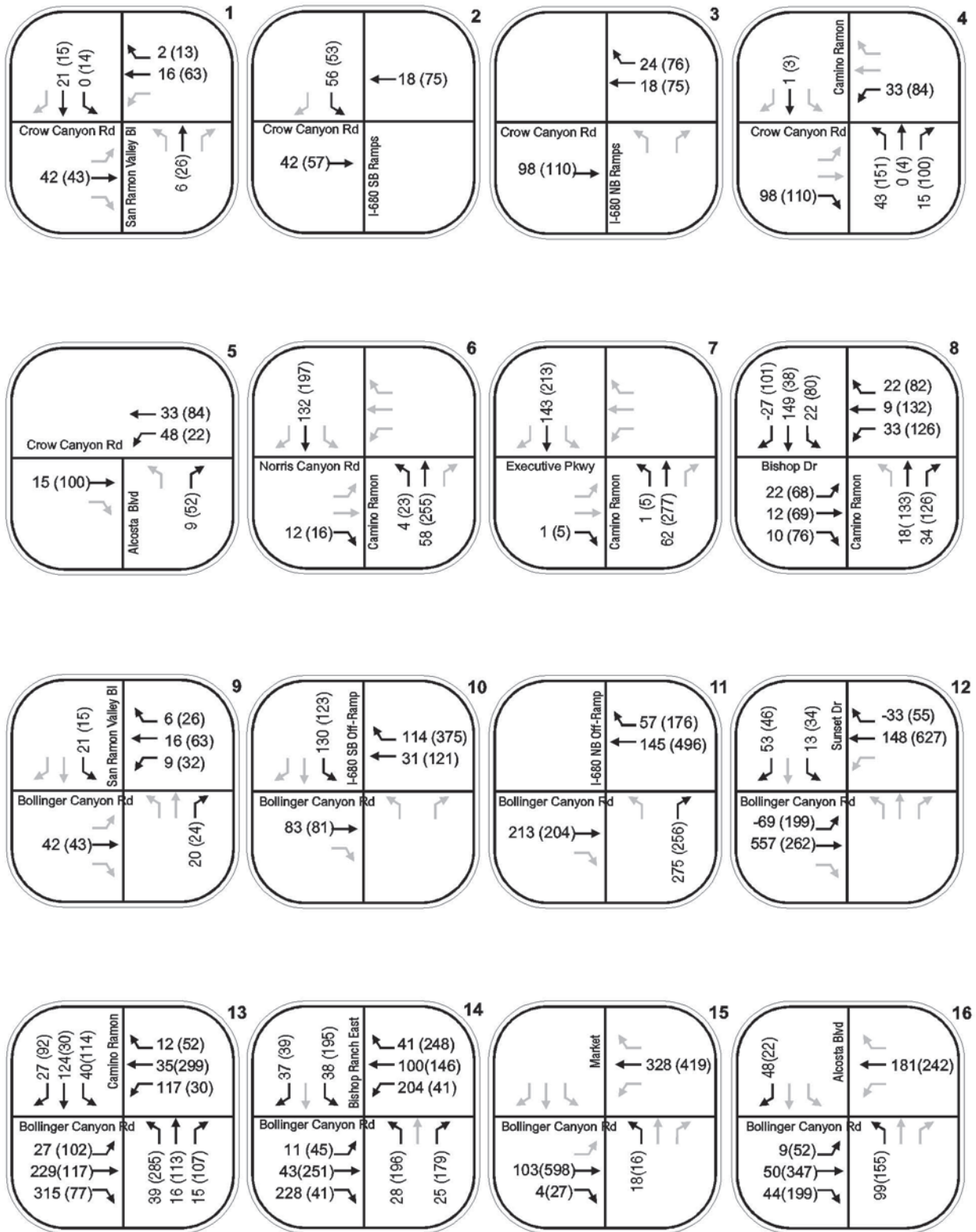
Two types of credits were applied to the office use trip generation. The first trip generation deduction is a “replacement” deduction, as it accounts for the teardown of 194,652 square feet of the existing Bishop Ranch 2 office building. The second trip generation deduction is a previous entitlement—328,220 square feet of Bishop Ranch 1A that has been entitled, and grandfathered in, under an existing development but that has yet to be constructed.

Bishop Ranch 1A consists of 681,769 square feet. Bishop Ranch 2, consisting of 194,652 square feet, currently exists and its traffic generation is included in the existing traffic volumes. Bishop Ranch 2 will be torn down. Since its traffic generation is already in existing traffic volume, 194,652 square feet of trip generation was applied as a deduction against the proposed square footage of office development in Bishop Ranch 1A of 681,769 square feet, leaving a net increase of 487,117 square feet of office space for the project. The increase of an additional 487,117 square feet is used in the Existing Plus Project scenario for this traffic study. Table 4.12-10 shows the traffic volumes from the existing office space to be deducted from the roadway network. Table 4.12-11 shows the resulting trip generation for the existing condition with the removal of the existing office space.

The second trip generation credit relates to existing entitlement on the southeast quadrant land use that has been incorporated into the City's General Plan 2020. When Sunset Development obtained the southeast quadrant property from Chevron, that purchase also included the right and entitlement to construct 1,056,311 square feet of office development. The traffic associated with the development of 1,056,311 square feet was included in the build-out traffic analysis prepared for the General Plan 2020 Environmental Impact Report. Of the 1,056,311 square feet, Sunset Development subsequently developed 728,091 square feet of office development, Bishop Ranch 1, and retained the right to build the remaining 328,220 square feet of office space in the future. This right and entitlement is conferred in the Second Amendment, dated May 28, 2002, to the assumed Chevron Development Agreement. Since the 328,220 square feet of office trip generation was already planned for in the General Plan 2020 trip generation analysis, this amount of credit has been taken in the Year 2020, with project analysis leaving a net increase of 353,550 square feet. Removing the existing Bishop Ranch 2 office space reduces the net increase further to 158,898 square feet. Table 4.12-12 illustrates the traffic volumes generated by the entitled office development. Table 4.12-13 shows the resulting trip generation for the project condition with both the existing office space and the entitled office space subtracted.

Trip Distribution

Trip distribution is the pattern of travel to and from the project during peak hours. Since the project has land uses that attract traffic both locally and regionally, the traffic analysis uses three distribution patterns. The office component would generally attract regional travel from the surrounding Tri-Valley community. The retail component would attract travel from the surrounding office park and residents living in the area. Other retail trips would be from the Tri-Valley regional area and would travel longer distances to the site. The residential component would produce regional travel destined to and from the freeways for the surrounding Tri-Valley community. The library component would produce locally generated traffic, and the Civic Center would attract trips regionally. Table 4.12 15 summarizes the distribution patterns used in the analysis, which was derived using CCTA's Regional Travel Demand Forecasting Model. The resultant project trips for the Flex Retail project conditions are shown in Exhibits 4.12-7a and 4.12-7b. Some movements noted on the exhibits are negative. Negative trips are the result of demolishing the existing Bishop Ranch 2 office space.



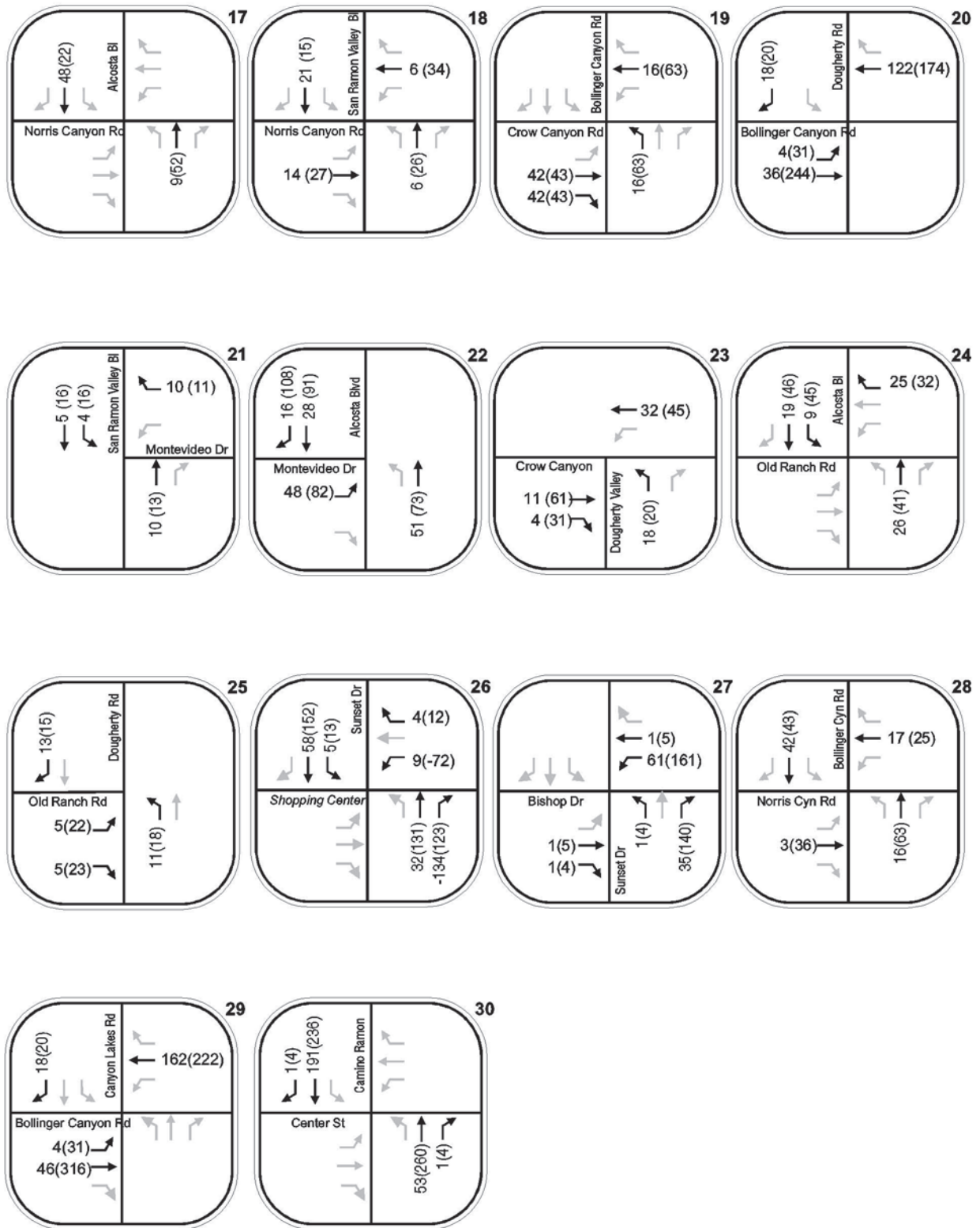
Source: DMJM HARRIS | AECOM, June 2007.



Michael Brandman Associates

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Exhibit 4.12-7a Flex Retail Traffic Volumes AM (PM) Peak Hour



Source: DMJM HARRIS | AECOM, June 2007.

Table 4.12-10: Trip Generation - Net Change from Demolition of Bishop Ranch 2

Description	ITE Code	Size	Units	Trip Generation Rates							Trips						
				AM			PM			Daily	PM			AM			Daily
				In	Out	Total	Out	In	Total		In	Out	Total	Out	In	Total	
Existing Office Park	750	194.6	KSF	1.73	0.21	1.95	0.25	1.51	1.76	12.52	337	42	379	48	294	342	2,437
Transportation Demand Management Reduction (15%)	—	—	—	—	—	—	—	—	—	—	-51	-6	-57	-7	-44	-51	-366
Transit Center Reduction (2%)	—	—	—	—	—	—	—	—	—	—	-7	-1	-8	-1	-6	-7	-49
Existing Office Park Trips Removed	—	—	—	—	—	—	—	—	—	—	280	35	315	40	244	284	2,023

Source: DMJM Harris, 2007.

Table 4.12-11: Trip Generation - Flex Retail Project Traffic Existing Analysis Summary

Description	AM			PM			Daily
	In	Out	Total	In	Out	Total	
Adjusted New Project Trips	1,261	407	1,668	1,161	1,834	2,995	30,127
Existing Office Removed	-280	-35	-315	-40	-244	-284	-2,023
Net New Project Trips (Existing)	981	372	1,353	1,121	1,590	2,711	28,105

Source: DMJM Harris, 2007.

Table 4.12-12: Trip Generation - Current Bishop Ranch 2 Entitlement

Description	ITE Code	Size	Units	Trip Generation Rates							Trips						
				AM			PM			Daily	PM			AM			Daily
				In	Out	Total	Out	In	Total		In	Out	Total	Out	In	Total	
Existing Office Park	750	328.2	KSF	1.59	0.20	1.79	0.21	1.32	1.53	11.67	523	65	588	70	433	503	3,829
Transportation Demand Management Reduction (15%)	—	—	—	—	—	—	—	—	—	—	-78	-10	-88	-10	-65	-75	-574
Transit Center Reduction (2%)	—	—	—	—	—	—	—	—	—	—	-10	-1	-12	-1	-9	-10	-77
Office Park Trips Removed in 2020	—	—	—	—	—	—	—	—	—	—	434	54	488	59	359	418	3,178

Source: DMJM Harris, 2007.

Table 4.12-13: Trip Generation - Flex Retail Project Traffic 2020 Analysis Summary

Description	AM			PM			Daily
	In	Out	Total	In	Out	Total	
Adjusted New Project Trips	1,261	407	1,668	1,161	1,834	2,995	30,127
Minus Office Entitlement	-434	-54	-488	-59	-359	-418	-3,178
Subtotal (New Project Trips – Entitlement)	827	353	1,180	1,102	1,475	2,577	26,949
Existing Office Removed	-280	-35	-315	-40	-244	-284	-2,023
Net New Project Trips (Existing)	547	318	865	1,062	1,231	2,293	24,926

Source: DMJM Harris, 2007.

Table 4.12-14: Trip Distribution Assumptions

Gateway	Local Distribution Pattern (Applies to Library and 40% of Retail)	Regional Distribution Pattern (Applies to Civic Center, Office, and 60% of Retail)	Regional Distribution Pattern (Applies to Residential)
I-680 North	0%	20%	30%
I-680 South	0%	30%	40%
San Ramon Valley Boulevard South	2%	2%	3%
Crow Canyon Road West	4%	9%	9%
Bollinger Canyon Road East	31%	18%	2%
San Ramon Valley Boulevard North	4%	2%	2%
Fostoria Way	1%	0%	0%
Bishop Ranch East	1%	0%	0%
Bishop Ranch West	1%	0%	0%
Neighborhoods west of I-680 north of Bollinger Canyon Road	5%	1%	1%
Neighborhoods west of I-680 south of Bollinger Canyon Road	6%	1%	1%
Chevron Park	0%	0%	0%
Market Place	1%	2%	0%
Crow Canyon Road East	7%	5%	2%
Canyon Lakes Drive North	5%	2%	0%
Canyon Lakes Drive South	5%	0%	0%
Alcosta Boulevard South	27%	8%	10%
Source: DMJM Harris, 2007.			

Project Roadway Improvements

Below is a summary of the roadway improvements that would occur as a result of the proposed project. These improvements are shown on Exhibit 4.12-8.

Sunset Drive

The existing signalized intersection at Sunset Drive and The Shops at Bishop Ranch/Bishop Ranch 2 entrance will be modified to accommodate the future Center Street.

Bishop Drive

Below is a summary of the access points to the Plaza District from Bishop Drive:

- Parking Structure A: This access will allow all movements. Turning movements from the parking structure will be stop-controlled.

Transportation

- West Street: This access will allow all movements. Turning movements from West Street will be stop-controlled.
- Parking Structure E: This access will allow all movements. Turning movements from the parking structure will be stop-controlled.
- East Street: This access will allow all movements. Turning movements from East Street will be stop-controlled.
- Immediately East of East Street: This access will allow only right-in, right-out movements because of limited sight distance to the east. Right-out turning movements will be stop-controlled.
- Parking Structure F and G: This access will allow for full movements and will be signalized.

South of Bollinger Canyon Road, Bishop Drive becomes the Bishop Ranch 1 East road. Bishop Ranch 1 East will provide access to the Bishop Ranch 1A parking structures. Three accesses, all stop-controlled for the minor movements, are proposed.

Bollinger Canyon Road

The easternmost access along Bollinger Canyon Road is a right-turn-only access at East Street. To facilitate movement into and out of this intersection, an auxiliary lane will be installed between Bishop Drive and Camino Ramon.

Two access points are noted along Bollinger Canyon Road between Camino Ramon and Sunset Drive. The first access (easternmost) is a right-in from an auxiliary lane on Bollinger Canyon Road. The second access is a right-out onto Bollinger Canyon Road, also into an auxiliary lane.

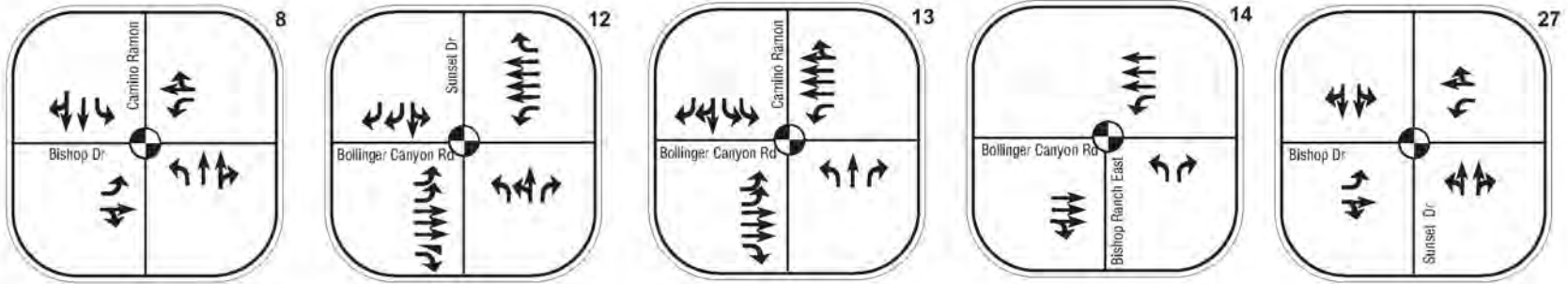
Camino Ramon

A single access point into the project will be located at Camino Ramon and Center Street, approximately halfway between Bollinger Canyon Road and Bishop Drive. This access point will be signalized and will be the pedestrian crossing between the western and eastern halves of the project. Right turns will be accommodated from Camino Ramon, but left turns will not. Movements will also be accommodated for the Center Street legs of the intersection.

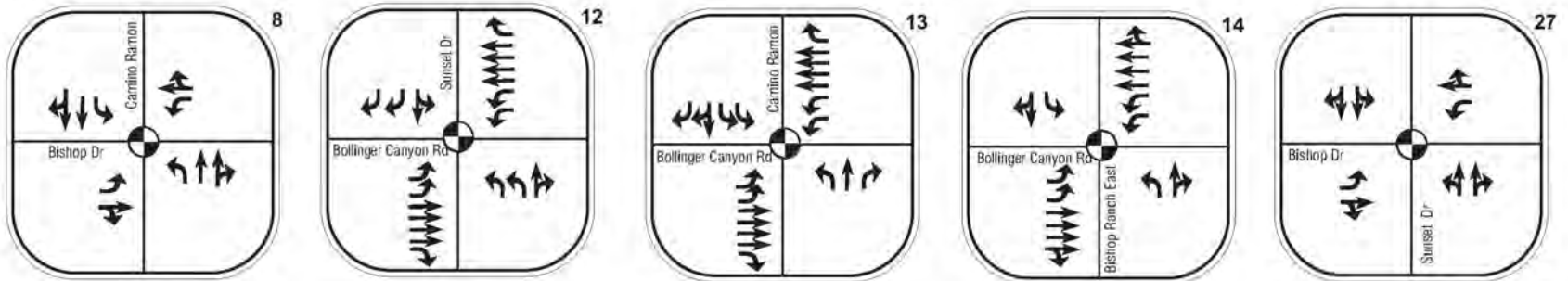
Bishop Ranch 1 Entrance Road

The Bishop Ranch 1 entrance road would provide access to Bishop Ranch 1A and City Hall. The northern access will serve as drop-off space. The southern access will be the primary ingress/egress for the parking structures. The two intersections will be stop-controlled for the side-street legs.

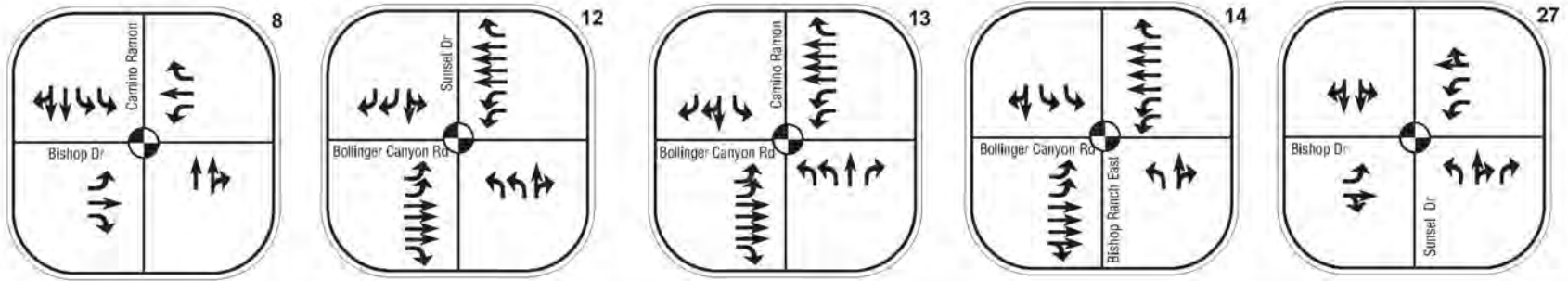
EXISTING GEOMETRY



CIP GEOMETRY



INTERSECTION MODIFICATIONS



Source: DMJM HARRIS | AECOM, July 2007.



Not to Scale

Michael Brandman Associates

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**Exhibit 4.12-8
Intersection Improvements**

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Planned and Proposed Transportation Improvements

Various local and regional agencies have identified transportation improvements in the project vicinity. These planned and proposed improvements would alter the roadway network, change pedestrian and bicycle routes, or alter public transit service. These transportation improvements are described below.

City of San Ramon General Plan

The San Ramon General Plan 2020 provides a long-term vision for the City. The General Plan 2020 focuses on achievable goals that can be implemented by 2020. The General Plan 2020 includes a Traffic and Circulation component.

Arterial Roadways

- **Crow Canyon Road:** Widen to eight lanes from I-680 to Alcosta Boulevard (completed in June 2007). Widen to six lanes from Alcosta Boulevard to Danville town limits. Preserve right-of-way for widening to four lanes from Bollinger Canyon Road to the Alameda County line.
- **Dougherty Road:** Support construction to six lanes from Crow Canyon Road to the Alameda County line.
- **Bollinger Canyon Road:** Widen to eight lanes from I-680 to Alcosta Boulevard. Construct to six lanes from Alcosta Boulevard to Dougherty Road (North). Construct to four lanes from Dougherty Road (North) to Dougherty Road (South).
- **San Ramon Valley Boulevard:** Four lanes from Montevideo Drive to Alcosta Boulevard (improvement completed).
- **Alcosta Boulevard Extension:** Extend Alcosta Boulevard north from Crow Canyon Road to Fostoria Parkway as a four-lane street. Widen and construct Fostoria Parkway as a four-lane roadway from Camino Ramon east to Alcosta Boulevard extension. (These streets are partially within the Danville town limits, and these projects would require the support and participation of the Town of Danville.)

Collector and Local Roadways

- **Deerwood Road:** Widen to four lanes from Deerwood Drive to Crow Canyon Road.
- **Camino Ramon:** Widen to four lanes from Crow Canyon Road to Fostoria Parkway (improvement completed).
- **Twin Creeks Drive:** Extend and construct as a four-lane street from Crow Canyon Road to Old Crow Canyon Road.

Bicycle and Pedestrian Facilities

- **Iron Horse Trail:** Study the feasibility of bicycle/pedestrian overcrossings on the Iron Horse Trail at Bollinger Canyon Road and Crow Canyon Road. (This study is currently underway.)
- **Fostoria Parkway:** Designate as a Class III bicycle facility from Crow Canyon Place to Iron Horse Trail (to be constructed).
- **Dougherty Road:** Provide new Class II bike lanes.

Bollinger Canyon Road Plan Line Study

A Plan Line Study is being prepared for the ultimate geometric alignment of Bollinger Canyon Road from San Ramon Valley Boulevard to Canyon Lakes Drive. The Plan Line Study is currently in the design phase and will be finalized and adopted by the end of 2007.

Contra Costa Countywide Comprehensive Transportation Plan

The Countywide Comprehensive Transportation Plan (CTP) 2004 Update is a 20-year plan developed by CCTA that serves as a long-range transportation planning document for Contra Costa County. During the development of the CTP 2004, the CCTA has identified a range of projects, with several of the projects being located in the study area. The following is a list of improvements in the project vicinity, excluding the improvements already described elsewhere in this section.

- Development of an Iron Horse Trail Corridor Concept Plan for Bollinger Canyon Road, Crow Canyon Road, and Sycamore Valley Road. The Concept Plan will study the feasibility of constructing pedestrian/bicycle overcrossing(s) along the corridor at the three identified locations.
- Installation of Iron Horse Trail signage for bicyclists and pedestrians along the entire length of Iron Horse Trail.
- Widening of San Ramon Valley Boulevard from Sycamore Valley Road to Crow Canyon Road from two to four lanes.
- Crow Canyon Road and Dougherty Road intersection modification. Reconfigure the eastbound approach on Crow Canyon Road to three through lanes and one right-turn lane, and reconfigure the southbound Dougherty Road south of the intersection to include an acceleration lane for vehicles that have made right-turns from the eastbound Crow Canyon Road.

Tri-Valley Transportation Plan

In 1994, seven jurisdictions comprised of Alameda County, Contra Costa County, Dublin, Pleasanton, Livermore, Danville and San Ramon formed the Tri-Valley Transportation Council (TVTC). In 1995, the TVTC adopted the Tri-Valley Transportation Plan/Action Plan for Routes of Regional Significance. The TVTC created a Joint Exercise of Powers Agreement (JEPA) and a Tri-Valley Transportation Development Fee was adopted and signed by all TVTC jurisdictions in 1998.

In addition, the TVTC identified 11 transportation improvement projects as “high priority” for the region, including:

- I-580/I-680 interchange (completed).
- SR 84 - I-580 to I-680 Expressway.
- SR 84 - Isabel/Route 84 interchange at I-580.
- I-680 Auxiliary Lane Project–Contra Costa (segments 1 and 3 completed).
- West Dublin BART Station (currently under construction).
- I-580 HOV Project.
- I-680 HOV Project-SR-84 to Sunol Grade.
- Foothill Road/San Ramon Road at I-580 interchange.
- Alcosta Boulevard/I-680 interchange (completed).
- Crow Canyon Road improvements - Alameda County portion.
- Vasco Road improvements - Alameda County portion.
- Express Bus Service - Alameda County (LAVTA).

Interstate 680 Investment Options Study

In 2003, DKS Associates, in association with CH2M Hill, prepared this study for the Contra Costa Transportation Authority. The study examined several long-term investment options for the I-680 corridor. The recommended option contained numerous improvements along I-680 in the study area. These improvements are referenced below.

- New Express Bus Service: Additional service between the study area and Martinez, East County, and Fremont/San Jose consistent with the Enhanced Scenario recommendations from the Express Bus Study; eight new buses in this service area; and expansion of the existing CCCTA maintenance facility to accommodate additional buses. The additional express bus service would not replace or compete with existing bus service.
- Initiation of a Project Study Report for the Norris Canyon Project: The Contra Costa Transportation Authority, in concert with San Ramon and Caltrans, will develop and finalize a PSR that will confirm the scope, schedule, and estimated costs of the Norris Canyon project. The Project will provide convenient and direct access for transit, car/vanpools to and from the San Ramon Transit Center and will improve safety by reducing the amount of weaving by HOVs entering or exiting the freeway. Exhibit 4.12-9 illustrates the HOV ramp concept. The Project Study Report is anticipated to be completed by August 2008.
- San Ramon Transit Center Enhancements: Includes expanded parking to be achieved through lease agreements with adjacent properties.
- HOV Lane Extension South (Alcosta Boulevard to south of the I-580 Junction): Includes re-striping the median and widening the outside shoulder to create the width necessary to extend

the HOV lanes through the interchange. This project may require design exemptions to accommodate an additional lane.

- Northbound HOV Lane Extension: North (Livorna Road to North Main Street): Through the SR-24 junction. A Project Study Report is currently underway.
- Sycamore Valley Road Direct HOV Ramps: Includes reconstruction of interchange, widening of median, and construction of new HOV-only on- and off-ramps in both the northbound and southbound directions.

Measure J

Contra Costa's Transportation Sales Tax Expenditure Plan, adopted by Contra Costa voters in 2004, will continue with the County's existing 0.5-cent transportation sales tax to 2034. The Expenditure Plan includes Capital Improvement Projects and Programs ranging from the Caldecott Tunnel Fourth Bore, Highway 4 expansion, intersection improvements on I-680 and SR-242, adding express bus service from Central Contra Costa to the San Ramon Valley, a San Ramon Valley School Bus Program, pedestrian, bicycle and trail facilities, and other improvements.

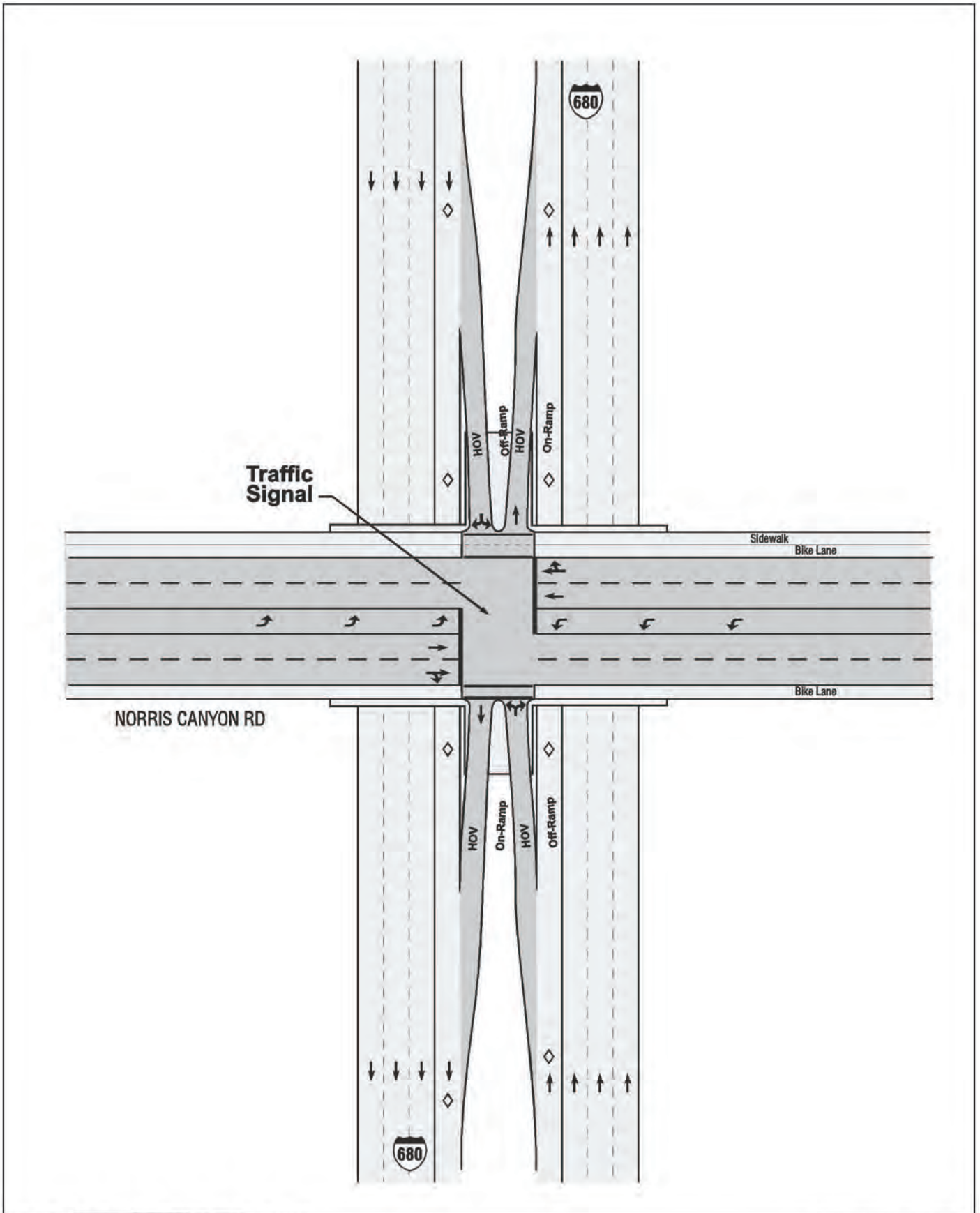
The Interstate 680 Carpool Lane Gap Closures/Transit Corridor Improvement is a critical capital improvement project for the San Ramon Valley. The project will extend existing bus/carpool/vanpool lanes on southbound I-680 from North Main Street to Livorna Road and northbound from North Main Street to north of SR-242, construct bus/carpool on-and-off ramps at Norris Canyon Road and/or Sycamore Valley Road, and include other transit corridor improvements.

County Connection Fiscal Years 2005–2014 Short-Range Transit Plan

A short-range transit plan addresses transit improvements expected over the next five years. The plan justifies the County Connection's funding requests and outlines likely changes in services and operations in the future. The plan is based on current information that is subject to change as new data becomes available. The changes listed below are divided in two groups: Track I and Track II. Track I changes are expected to be implemented in the foreseeable future. Track II changes depend on the availability of funding and may or may not be implemented within a reasonable period.

Track I Planned Service Changes

- Route 121 Alignment Changes
- New Service Using Out-of Service Bus Trips: This project will review current out-of service bus trips for the potential of operating this trip or portions of these trips as regular in-service trips. Each day, County Connection buses travel between the operations facility and the starting points of the routes. These trips could provide service between San Ramon and Dublin, and between downtown Concord and the north Concord industrial area.



Source: DMJM HARRIS | AECOM, June 2007.

Track II Proposed Service Changes

- Dougherty Valley Transit Service: This transit plan recommends the creation of an all-day route serving Dougherty Valley and Dublin BART, changes to existing Route 121 and the creation of a new local San Ramon bus route. The highest priority has been the new Dougherty Valley route and some of the changes on Route 121. The inauguration of Dougherty Valley Transit Service took place December 2006.
- CCCTA Route 920 service expansion to serve a future, fourth Altamont Commuter Express train: Currently, by agreement with ACE, County Connection provides service to each of ACE's three morning and afternoon trains. Route 920 links the Pleasanton Train Station to Bishop Ranch in San Ramon as well as to Walnut Creek.
- Provide limited holiday service on New Year's Day, Labor Day, Fourth of July, Memorial Day, Thanksgiving, or Christmas Day. Currently, no service is provided during these holidays.
- Provide restructured weekend service designed to link major weekend traffic generators with more densely developed residential areas. This improvement would mostly focus on restoring Saturday service to areas that had their Saturday service eliminated as part of the recent efforts to reduce the Authority's operating budget deficit.
- Expand Paratransit to provide ADA parallel service during the same times and days as Track II fixed-route projects.
- Increase express bus service (various routes).

San Ramon Transit Plan

In 2004, San Ramon initiated a public transit analysis to provide an objective assessment and overview of the multiple transit services and operational alternatives available to the City. The final plan, adopted by the San Ramon City Council in April 2005, is a transit-planning tool to assist and guide the City's policy makers toward the pursuit of improved and expanded transit service throughout San Ramon.

The San Ramon Transit Plan articulates a vision for public transit services for residents, seniors, youth, commuters, and the business community. San Ramon's vision of transit service includes:

- Fixed route circulator service.
- Service to south San Ramon, including California High School, Pine Valley Middle School, and the San Ramon Senior Center.
- Expanded weekend service.
- Service to activity centers along the northwest corridor of San Ramon Valley Boulevard.

Transportation

- Maximize the existing regional transit routes to effectively meet the needs of all San Ramon residents and commuters.
- Maximize the use of transit funds.

Contra Costa Countywide Bicycle Plan

This plan describes bicycle and pedestrian needs in the Contra Costa County and outlines goals and strategies as they apply to bicycling and walking. The plan seeks to encourage local efforts to improve bicycle and pedestrian facilities facilitating safety and attractiveness of bicycling and walking. The plan lists several projects proposed in the study area, including already mentioned Iron Horse Trail overcrossing at Bollinger Canyon Road, as well as Old Ranch Road Bicycle Trail, which would run from Old Ranch Park to Stage Coach Road.

Bay Area Rapid Transit Fiscal Year 2006–2015 Short-Range Transit Plan and Capital Improvement Plan

This report identifies a new West Dublin/Pleasanton station that is planned to be constructed on Blue Line between Castro Valley and Dublin/Pleasanton stations in the median of I-580. The station is projected to open in fiscal year 2009.

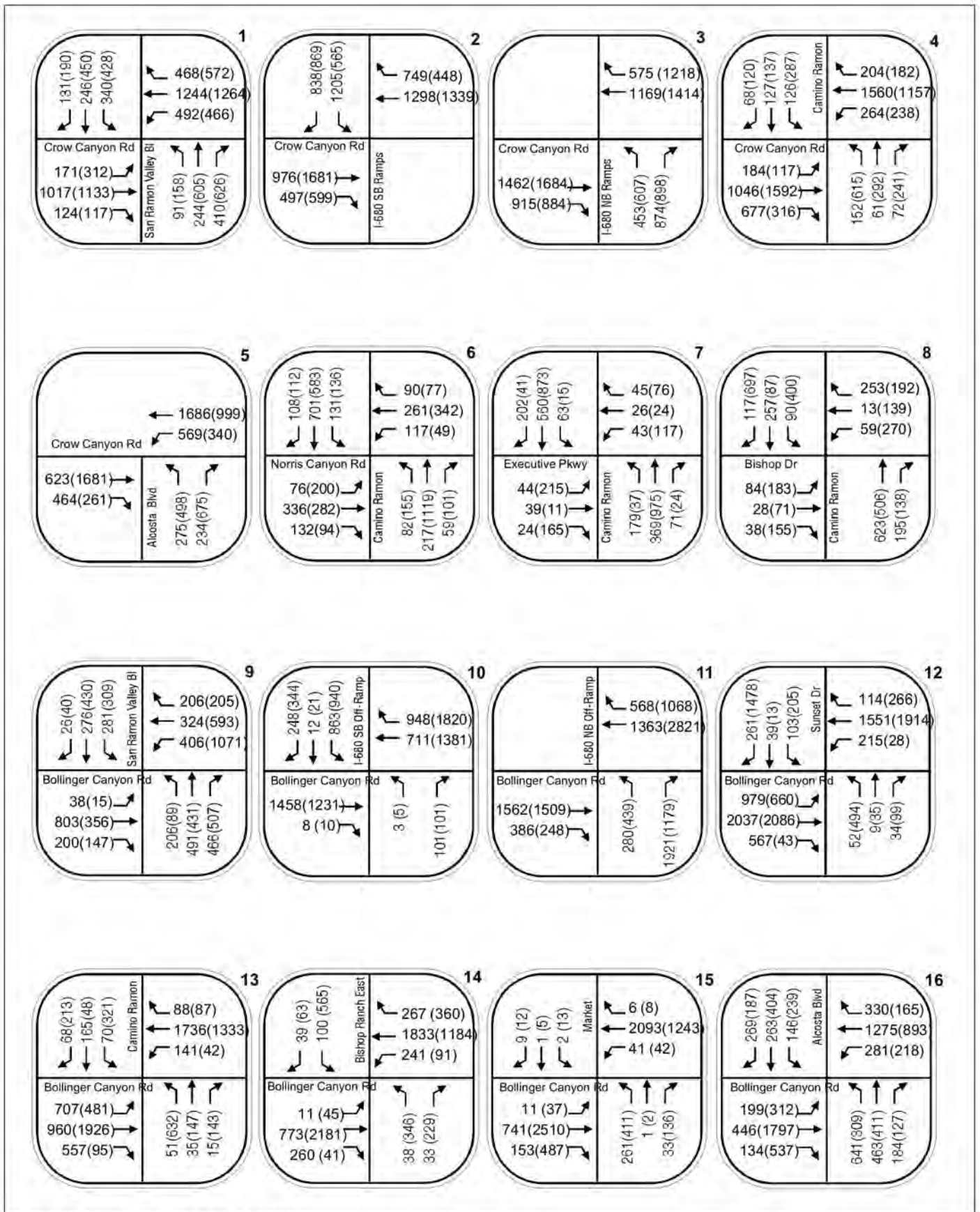
Existing Plus Project Intersection Operations

Impact TRANS-1: Trips associated with the proposed project would substantially degrade intersection performance under Existing Plus Project conditions.

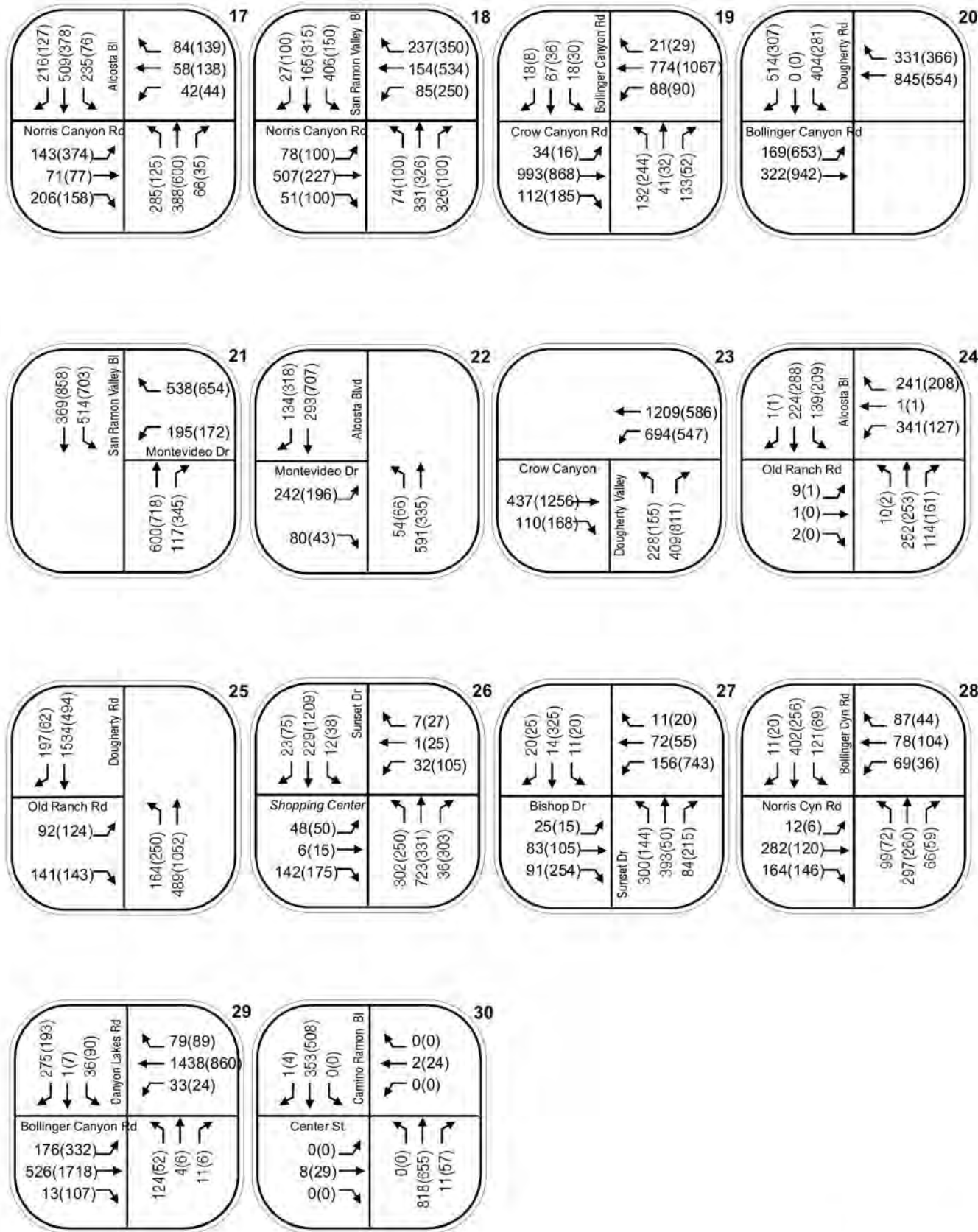
Impact Analysis

The trip generation for the proposed project was added to the surrounding roadway network according to the trip distribution patterns. These new trips were then added to the existing traffic volumes to arrive at the Existing Plus Project traffic volumes. Table 4.12-16 summarizes intersection operations for the without project and with project scenarios under Existing Plus Project conditions. Exhibits 4.12-10a and 4.12-10b show the Existing Plus Project peak-hour traffic volumes. Exhibits 4.12-11a and 4.12-11b show the Existing Plus Project daily traffic volumes.

This intersection operations analysis assumes that four through travel lanes are available on Camino Ramon between Bishop Drive and Bollinger Canyon Road. The project applicant intends to allow parallel parking on Camino Ramon in the Plaza District during non-peak commute hours that would result in the narrowing of Camino Ramon to one through lane between Bishop Drive and Bollinger Canyon Road.



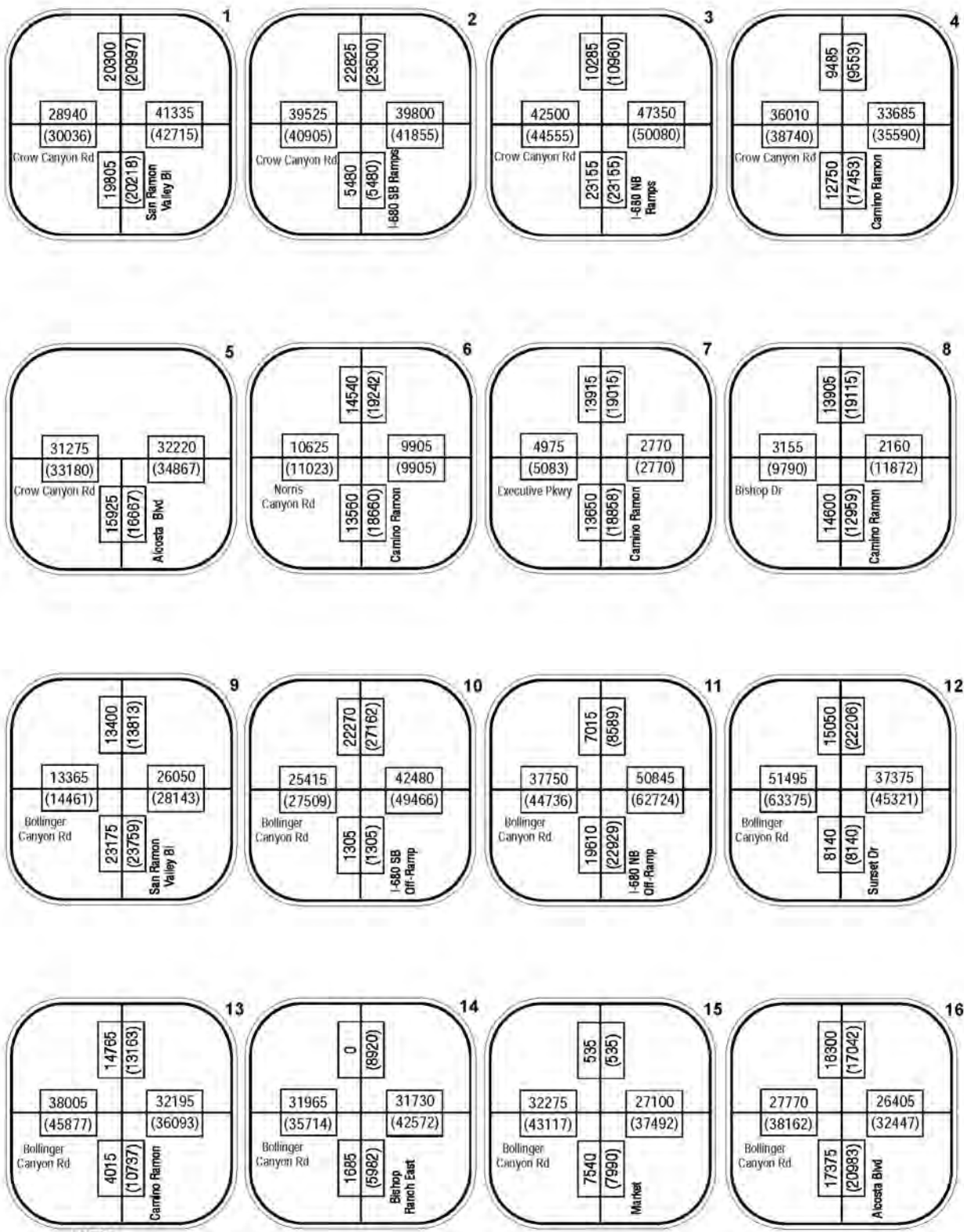
Source: DMJM HARRIS | AECOM, July 2007.



Source: DMJM HARRIS | AECOM, July 2007.



Exhibit 4.12-10b Existing Plus Project Traffic Volumes AM (PM) Peak Hour



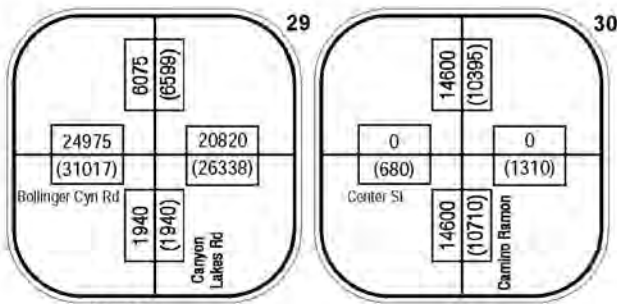
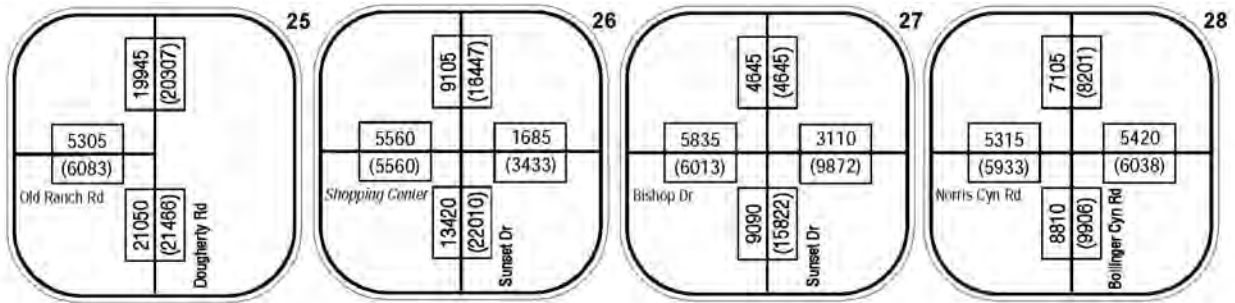
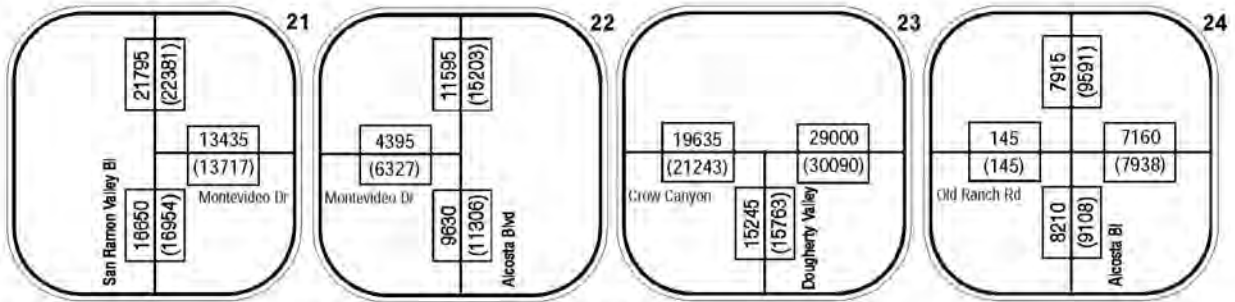
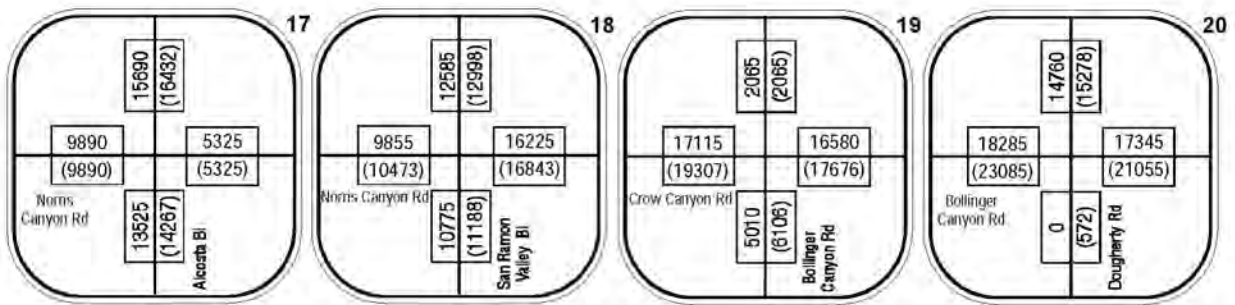
KEY

XXXX = Total Existing Daily Traffic
 (XXXX) = (Total Existing + Project Daily Traffic)

Source: DMJM HARRIS | AECOM, July 2007.



Exhibit 4.12-11a
 Existing Plus Project Traffic
 Volumes Daily Traffic Volumes



KEY

XXXX = Total Existing Daily Traffic
 (XXXX) = (Total Existing + Project Daily Traffic)

Source: DMJM HARRIS | AECOM, July 2007.



Exhibit 4.12-11b
 Existing Plus Project Traffic
 Volumes Daily Traffic Volumes

Table 4.12-15: Existing Plus Project Intersection Operations

Intersection	Without Project				With Project				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
1. Crow Canyon Road/San Ramon Valley Boulevard	0.56	A	0.74	C	0.57	A	0.75	C	0.01	0.01
2. Crow Canyon Road/I-680 Southbound Ramps	0.59	A	0.57	A	0.61	B	0.58	A	0.02	0.01
3. Crow Canyon Road/I-680 Northbound Ramps	0.52	A	0.60	A	0.54	A	0.62	A	0.02	0.02
4. Crow Canyon Road/Camino Ramon	0.57	A	0.76	C	0.63	B	0.82	D	0.06	0.06
5. Crow Canyon Road/Alcosta Boulevard	0.44	A	0.67	B	0.45	A	0.72	C	0.01	0.05
6. Camino Ramon/Norris Canyon Road	0.46	A	0.59	A	0.51	A	0.67	B	0.05	0.08
7. Camino Ramon/Executive Parkway	0.36	A	0.43	A	0.40	A	0.51	A	0.04	0.08
8. Camino Ramon/Bishop Drive	0.36	A	0.46	A	0.45	A	0.59	A	0.09	0.13
9. Bollinger Canyon Road/San Ramon Valley Boulevard	0.79	C	0.88	D	0.82	D	0.92	E	0.03	0.04
10. Bollinger Canyon Road/I-680 Southbound Ramps	0.50	A	0.57	A	0.55	A	0.64	B	0.05	0.07
11. Bollinger Canyon Road/I-680 Northbound Ramps	0.75	C	0.71	C	0.88	D	0.88	D	0.13	0.17
12. Bollinger Canyon Road/Sunset Drive/Chevron Park	0.66	B	0.68	B	0.67	B	1.06	F	0.01	0.38
13. Bollinger Canyon Road/Camino Ramon	0.56	A	0.74	C	0.63	B	0.70	B	0.07	-0.04
14. Bollinger Canyon Road/Bishop Ranch 1 East	0.39	A	0.56	A	0.43	A	0.83	D	0.04	0.27
15. Bollinger Canyon Road/Market Place	0.45	A	0.54	A	0.52	A	0.67	B	0.07	0.13
16. Bollinger Canyon Road/Alcosta Boulevard	0.71	C	0.81	D	0.80	D	0.92	E	0.09	0.11

Table 4.12-15 (Cont.): Existing Plus Project Intersection Operations

Intersection	Without Project				With Project				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
17. Alcosta Boulevard/Norris Canyon Road	0.40	A	0.43	A	0.41	A	0.45	A	0.01	0.02
18. San Ramon Valley Boulevard/Norris Canyon Road	0.55	A	0.55	A	0.56	A	0.57	A	0.01	0.02
19. Bollinger Canyon Road/Crow Canyon Road	0.46	A	0.45	A	0.48	A	0.50	A	0.02	0.05
20. Bollinger Canyon Road/Dougherty Road	0.50	A	0.47	A	0.54	A	0.53	A	0.04	0.06
21. San Ramon Valley Boulevard /Montevideo Drive	0.62	B	0.81	D	0.62	B	0.82	D	0.00	0.01
22. Alcosta Boulevard/Montevideo Drive	0.27	A	0.28	A	0.31	A	0.36	A	0.04	0.08
23. Crow Canyon Road/Dougherty Road	0.41	A	0.57	A	0.42	A	0.58	B	0.01	0.01
24. Alcosta Boulevard/Old Ranch Road	0.30	A	0.26	A	0.32	A	0.30	A	0.02	0.04
25. Old Ranch Road/Dougherty Road	0.64	B	0.37	A	0.65	B	0.38	A	0.01	0.01
26. Sunset Drive/Shops at Bishop Ranch	0.30	A	0.38	A	0.27	A	0.65	B	0.03	0.27
27. Bishop Drive/Sunset Drive	0.36	A	0.47	A	0.41	A	0.67	B	0.05	0.20
28. Bollinger Canyon Road/Norris Canyon Road	0.86*	C*	0.37*	B*	0.90*	C*	0.45*	B*	0.04*	0.08*
29. Bollinger Canyon Road/Canyon Lakes Drive	0.59	A	0.54	A	0.65	B	0.63	B	0.06	0.09
30. Camino Ramon/Center Street^	—	—	—	—	0.26	A	0.23	A	NA	NA

Notes:
Bold denotes deficient intersection operation.
 * HCM unsignalized intersection analysis.
 ^ Future intersection associated with project.
 Source: DMJM Harris, 2007.

Operations at three intersections would degrade to unacceptable LOS E or F as a result of project-generated trips:

- **Bollinger Canyon Road/San Ramon Valley Boulevard:** The existing PM peak hour of LOS D would degrade to LOS E under Existing Plus Project with project conditions.
- **Bollinger Canyon Road/Sunset Drive/Chevron Park:** The existing PM peak hour of LOS D would degrade to LOS F under Existing Plus Project with project conditions.
- **Bollinger Canyon Road/Alcosta Boulevard:** The existing PM peak hour of LOS D would degrade to LOS E under Existing Plus Project with project conditions.

Mitigation is proposed that would implement intersection improvements at all three intersections. Table 4.12-16 provides a comparison of the unmitigated Existing Plus Project condition to the mitigated Existing Plus Project condition. As shown in the table, all intersections would operate at an acceptable LOS after the implementation of mitigation. Existing Plus Project intersection operation impacts would be less than significant.

Table 4.12-16: Existing Plus Project Mitigated Intersection Operations

Intersection	With Project, Unmitigated				With Project, Mitigated				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
9. Bollinger Canyon Road/ San Ramon Valley Boulevard	0.82	D	0.92	E	0.68	B	0.74	C	-0.14	-0.18
12. Bollinger Canyon Road/ Sunset Drive/Chevron Park	0.67	B	1.06	F	0.67	B	0.87	D	0.00	0.19
16. Bollinger Canyon Road/Alcosta Boulevard	0.80	D	0.92	E	0.80	D	0.74	C	0.00	-0.07

Source: DMJM Harris, 2007.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-1a When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a northbound right-turn lane on San Ramon Valley Boulevard at Bollinger Canyon Road. The proposed intersection improvements are part of the City Capital Improvement Program.

MM TRANS-1b This mitigation consists of two parts:

1. When the improvements are warranted by the City's annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a free southbound right-turn lane on Sunset Drive at Bollinger Canyon Road. The southbound curb lane along Sunset Drive would be signed for northbound I-680 only. This lane would be free-flowing into the westbound curb lane on Bollinger Canyon Road. The adjacent lane on Bollinger Canyon Road would be physically separated from the curb lane to prevent weaving between Sunset Drive and the northbound I-680 on-ramp.
2. To respond to the off-peak parking on Camino Ramon, curbside traffic will be required to turn right at Bishop Drive, prior to the proposed parking. To enhance the effectiveness of this mitigation measure, the project applicant shall install signage along the southbound approach of Camino Ramon prior to the intersection with Bishop Drive indicating that the curbside, right southbound lane between Bishop Drive and Bollinger Canyon Road is through-right-turn lane during peak commute hours. During non-peak commute hours, Camino Ramon shall have one through travel lane in each direction between Bishop Drive and Bollinger Canyon Road.

MM TRANS-1c When the improvements are warranted by the City's annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a third eastbound and westbound through lane on Bollinger Canyon Road at Alcosta Boulevard. The proposed intersection improvements are part of the City Capital Improvement Program.

Level of Significance After Mitigation

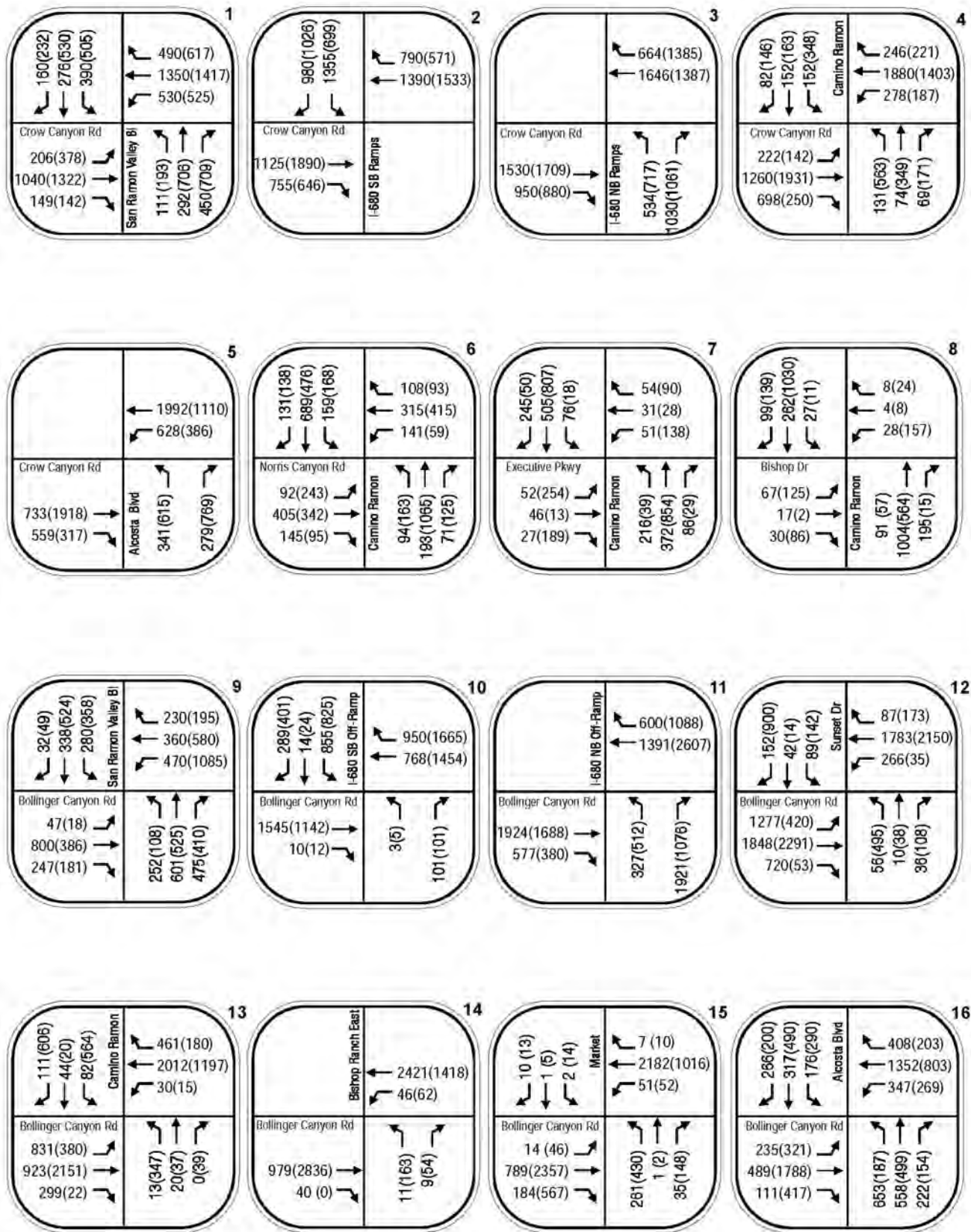
Less than significant impact.

Year 2020 Intersection Operations

Impact TRANS-2: Trips associated with the proposed project would substantially degrade intersection performance under Year 2020 conditions.

Impact Analysis

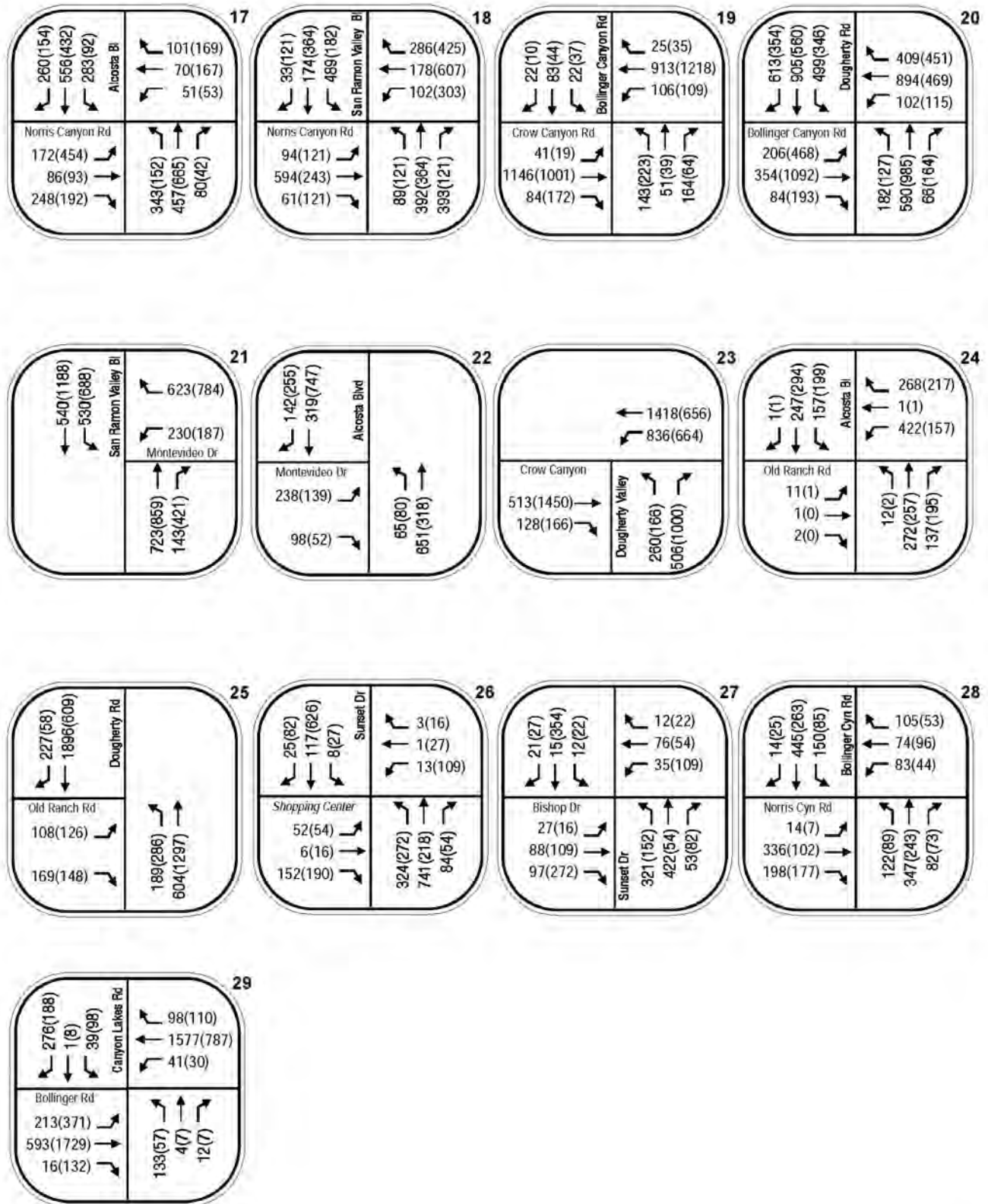
Year 2020 background conditions were derived from the most recent version of the Contra Costa County Travel Demand Model. These background conditions account for forecast growth in the County and planned and proposed roadway improvements. Note that this model assumes the development of the 328,220 square feet of previously entitled office space on Parcel 1A. Exhibits 4.12-12a and 4.12-12b show the peak-hour 2020 background traffic volumes. Exhibits 4.12-13a and 4.12-13b show the Year 2020 intersection geometries, which are based on the improvements



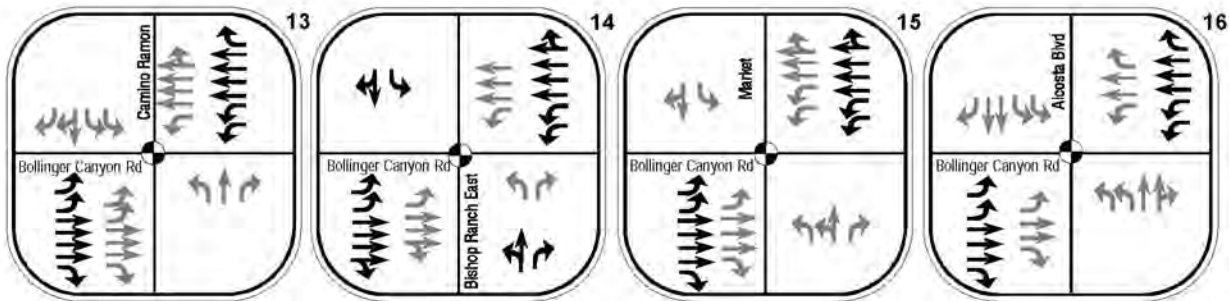
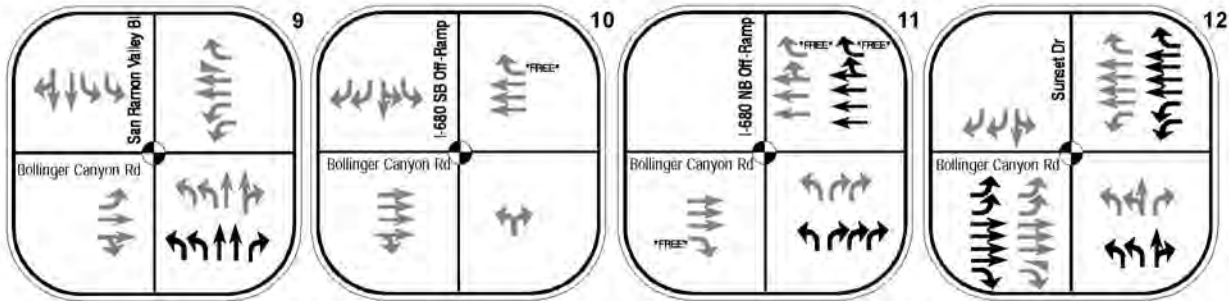
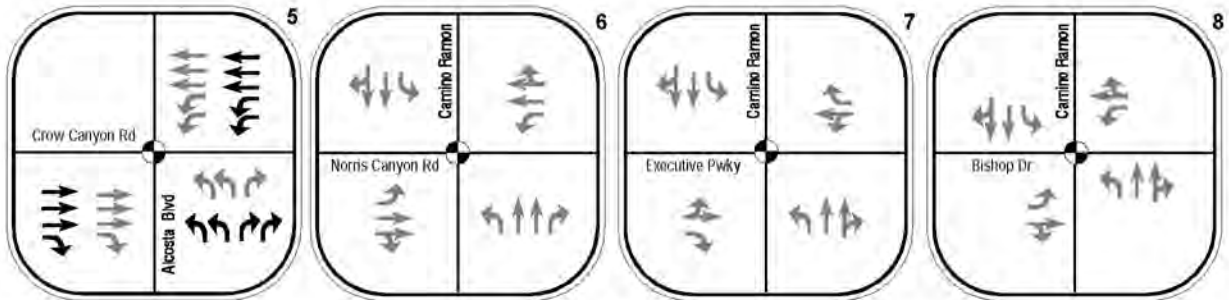
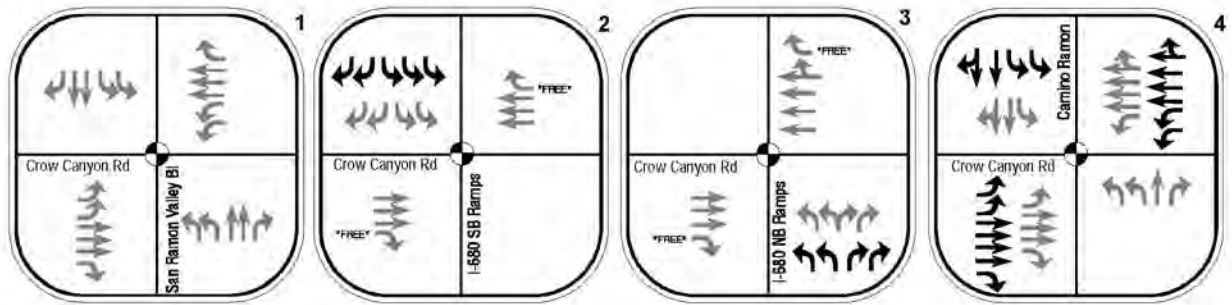
Source: DMJM HARRIS | AECOM, July 2007.



Exhibit 4.12-12a Year 2020 Without Project Traffic Volumes

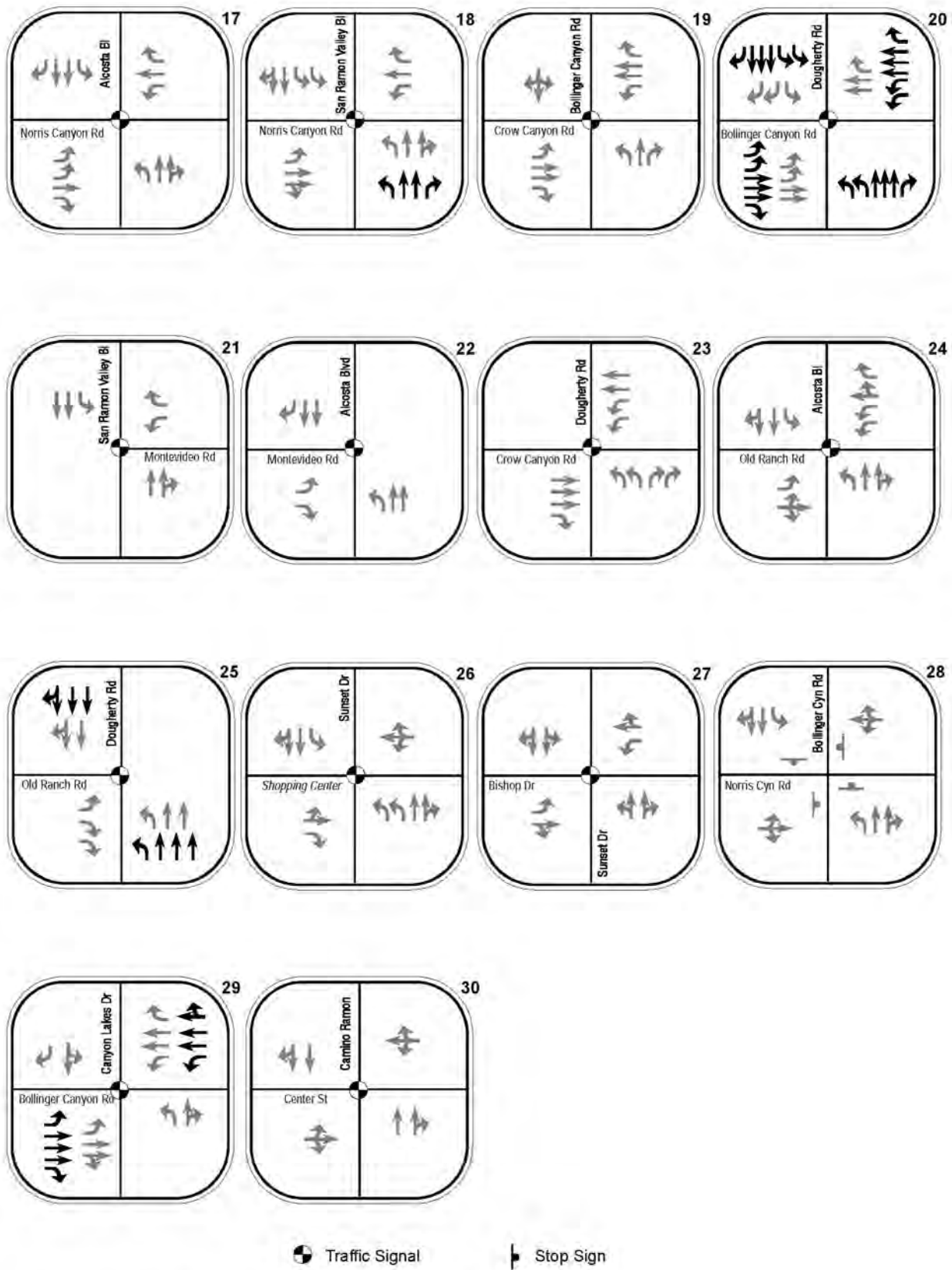


Source: DMJM HARRIS | AECOM, July 2007.



 Traffic Signal  Stop Sign

Source: DMJM HARRIS | AECOM, July 2007.



Source: DMJM HARRIS | AECOM, July 2007.

identified in the City of San Ramon’s Capital Improvement Program. Most of the improvements are along Crow Canyon Road and Bollinger Canyon Road.

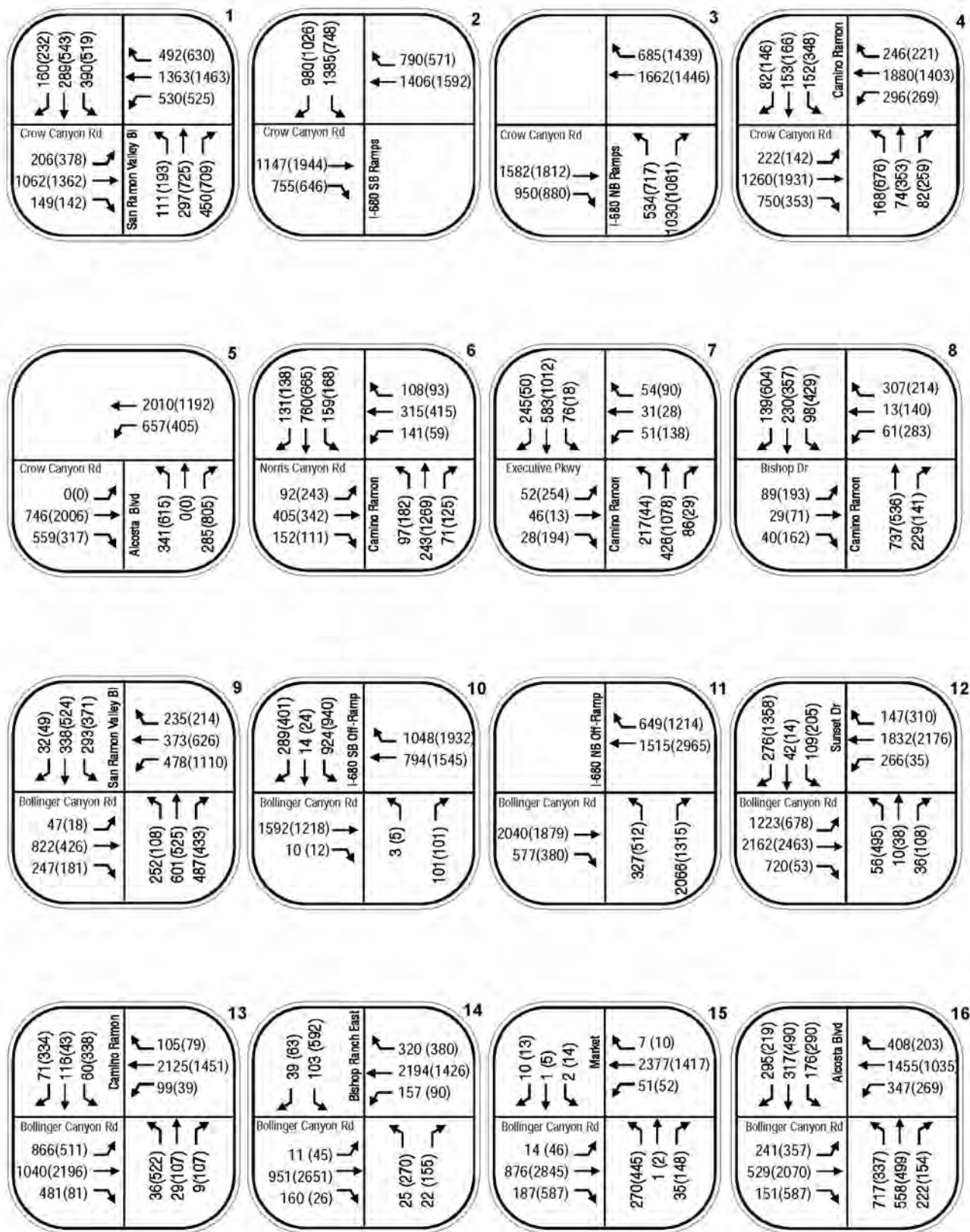
The trip generation for the proposed project was added to the surrounding roadway network according to the trip distribution patterns. These new trips were then added to the Year 2020 background traffic volumes to arrive at Year 2020 with project traffic volumes. Table 4.12-17 summarizes intersection operations for the without and with project scenarios under Year 2020 conditions. Exhibits 4.12-14a and 4.12-14b show the Year 2020 peak-hour traffic volumes. Exhibits 4.12-15a and 4.12-15b show the Year 2020 daily traffic volumes.

Table 4.12-17: Year 2020 Intersection Operations

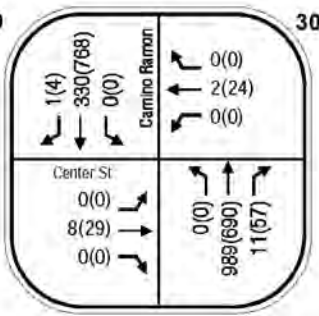
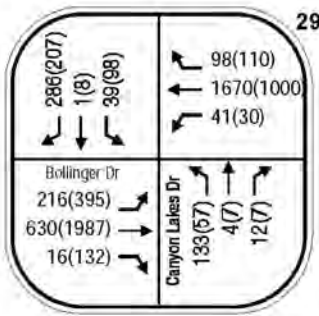
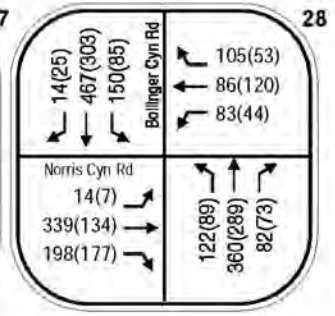
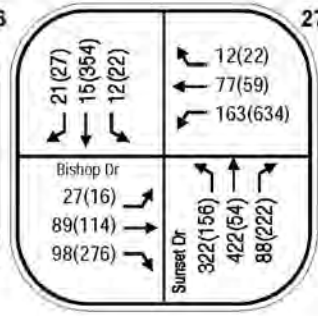
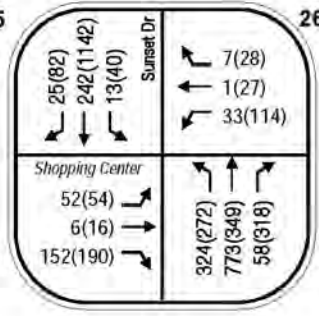
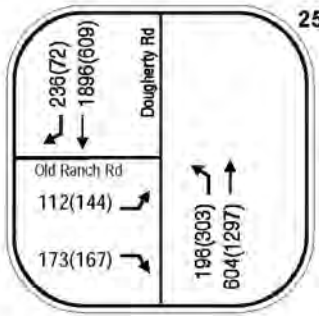
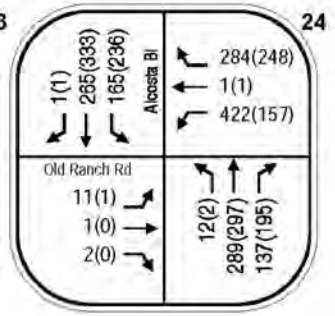
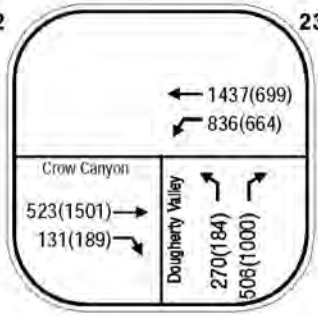
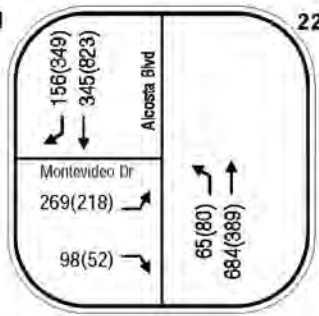
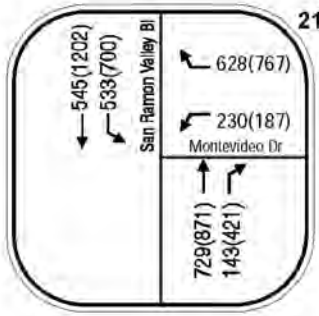
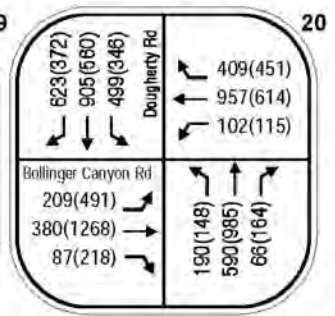
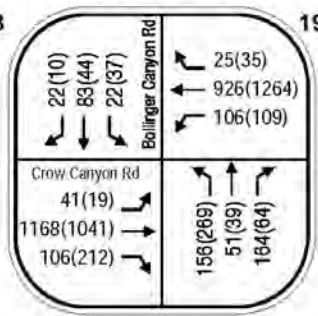
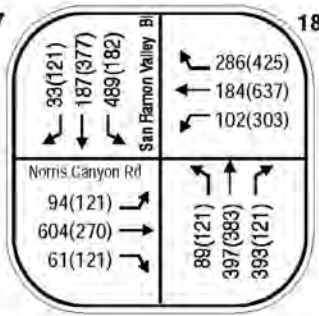
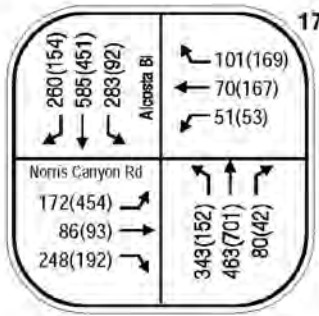
Intersection	Without Project				With Project				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
1. Crow Canyon Road/San Ramon Valley Boulevard	0.61	B	0.87	D	0.62	B	0.88	D	0.01	0.01
2. Crow Canyon Road/I-680 Southbound Ramps	0.56	A	0.66	B	0.56	A	0.67	B	0.00	0.01
3. Crow Canyon Road/I-680 Northbound Ramps	0.60	B	0.64	B	0.61	B	0.66	B	0.01	0.02
4. Crow Canyon Road/Camino Ramon	0.59	A	0.68	B	0.62	B	0.71	C	0.03	0.03
5. Crow Canyon Road/Alcosta Boulevard	0.53	A	0.69	B	0.54	A	0.72	C	0.01	0.03
6. Camino Ramon/Norris Canyon Road	0.56	A	0.73	C	0.58	A	0.79	C	0.02	0.06
7. Camino Ramon/Executive Parkway	0.43	A	0.52	A	0.45	A	0.58	A	0.02	0.06
8. Camino Ramon/Bishop Drive	0.43	A	0.54	A	0.53	A	0.62	B	0.10	0.08
9. Bollinger Canyon Road/San Ramon Valley Boulevard	0.75	C	0.81	D	0.76	C	0.84	D	0.01	0.03
10. Bollinger Canyon Road/I-680 Southbound Ramps	0.56	A	0.62	B	0.59	A	0.67	B	0.03	0.05
11. Bollinger Canyon Road/I-680 Northbound Ramps	0.77	C	0.70	C	0.82	D	0.75	C	0.05	0.05
12. Bollinger Canyon Road/Sunset Drive/Chevron Park	0.80	D	0.85	D	0.80	D	1.05	F	0.0	0.20
13. Bollinger Canyon Road/Camino Ramon	0.62	B	0.68	B	0.69	B	0.66	B	0.07	-0.02

Table 4.12-17 (Cont.): Year 2020 Intersection Operations

Intersection	Without Project				With Project				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
14. Bollinger Canyon Road/ Bishop Ranch 1 East	0.36	A	0.53	A	0.39	A	0.80	C	0.03	0.27
15. Bollinger Canyon Road/Market Place	0.43	A	0.53	A	0.46	A	0.61	B	0.03	0.08
16. Bollinger Canyon Road/Alcosta Boulevard	0.67	B	0.75	C	0.71	C	0.80	D	0.04	0.05
17. Alcosta Boulevard/Norris Canyon Road	0.48	A	0.52	A	0.49	A	0.53	A	0.01	0.01
18. San Ramon Valley Boulevard/Norris Canyon Road	0.60	A	0.66	B	0.60	B	0.68	B	0.00	0.02
19. Bollinger Canyon Road/ Crow Canyon Road	0.55	A	0.55	A	0.57	A	0.59	A	0.02	0.04
20. Bollinger Canyon Road/ Dougherty Valley Road	0.61	B	0.63	B	0.63	B	0.64	B	0.02	0.01
21. San Ramon Valley Boulevard/Montevideo Drive	0.69	B	0.88	D	0.70	B	0.89	D	0.01	0.01
22. Alcosta Boulevard/ Montevideo Drive	0.33	A	0.35	A	0.36	A	0.41	A	0.03	0.06
23. Crow Canyon Road/ Dougherty Valley Road	0.50	A	0.55	A	0.50	A	0.56	A	0.00	0.01
24. Alcosta Boulevard/ Old Ranch Road	0.37	A	0.31	A	0.38	A	0.35	A	0.01	0.04
25. Old Ranch Road/ Dougherty Road	0.58	A	0.37	A	0.59	A	0.39	A	0.01	0.02
26. Sunset Drive/Shops at Bishop Ranch	0.28	A	0.41	A	0.23	A	0.55	A	-0.05	0.14
27. Bishop Drive/ Sunset Drive	0.39	A	0.51	A	0.44	A	0.66	B	0.05	0.15
28. Bollinger Canyon Road/Norris Canyon Road	1.13*	E*	0.49*	B*	1.17*	E*	0.57*	B*	0.04	0.08
29. Bollinger Canyon Road/Canyon Lakes Drive	0.59	A	0.50	A	0.61	B	0.56	A	0.02	0.06
30. Camino Ramon/Center Street^	—	—	—	—	0.31	A	0.24	A	N/A	N/A



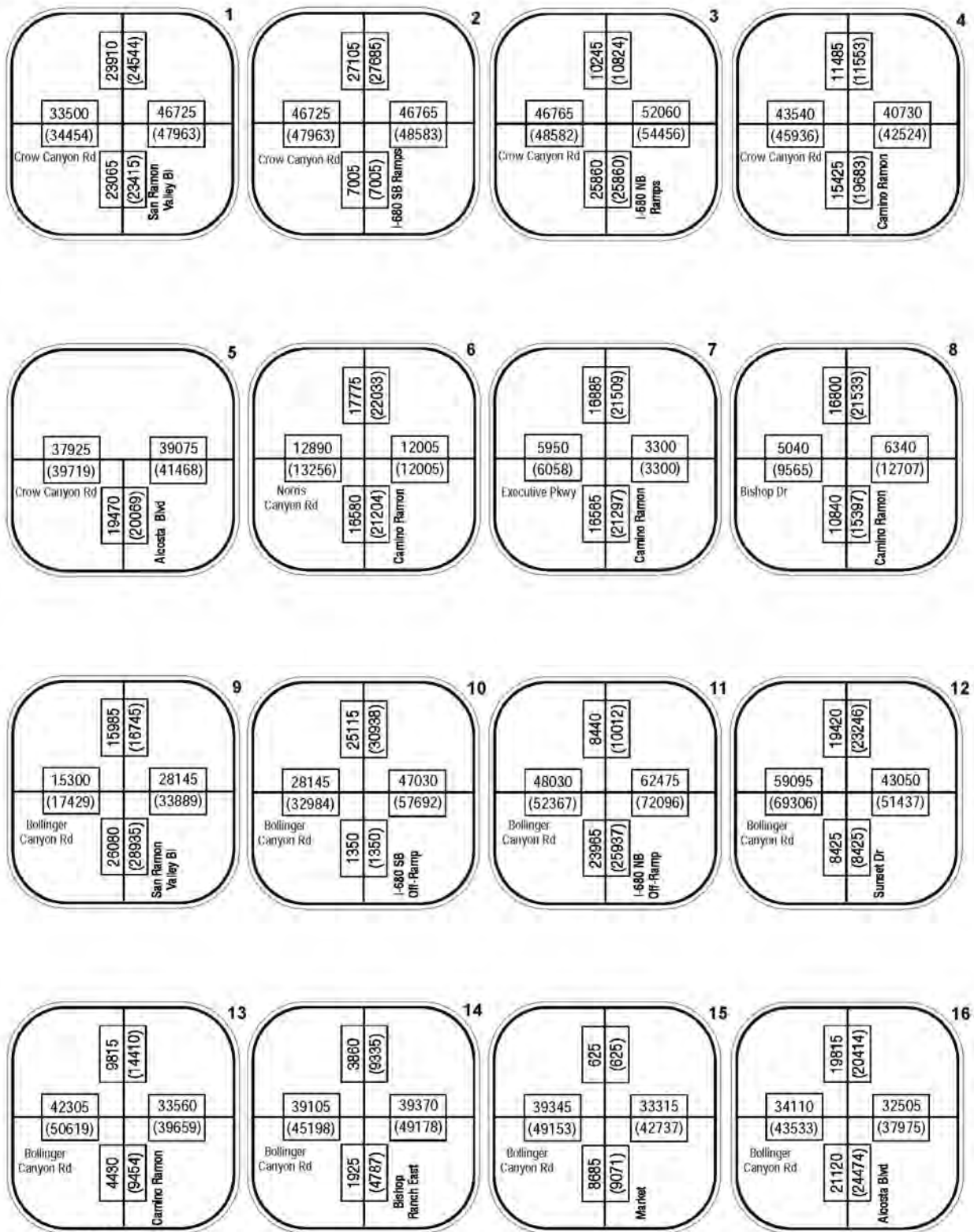
Source: DMJM HARRIS | AECOM, July 2007.



Source: DMJM HARRIS | AECOM, July 2007.



Exhibit 4.12-14b
Year 2020 With Project Traffic
Volumes AM (PM) Peak Hour



KEY

XXXX = Total 2020 Daily Traffic
 (XXXX) = (Total 2020 + Project Daily Traffic)

Source: DMJM HARRIS | AECOM, July 2007.

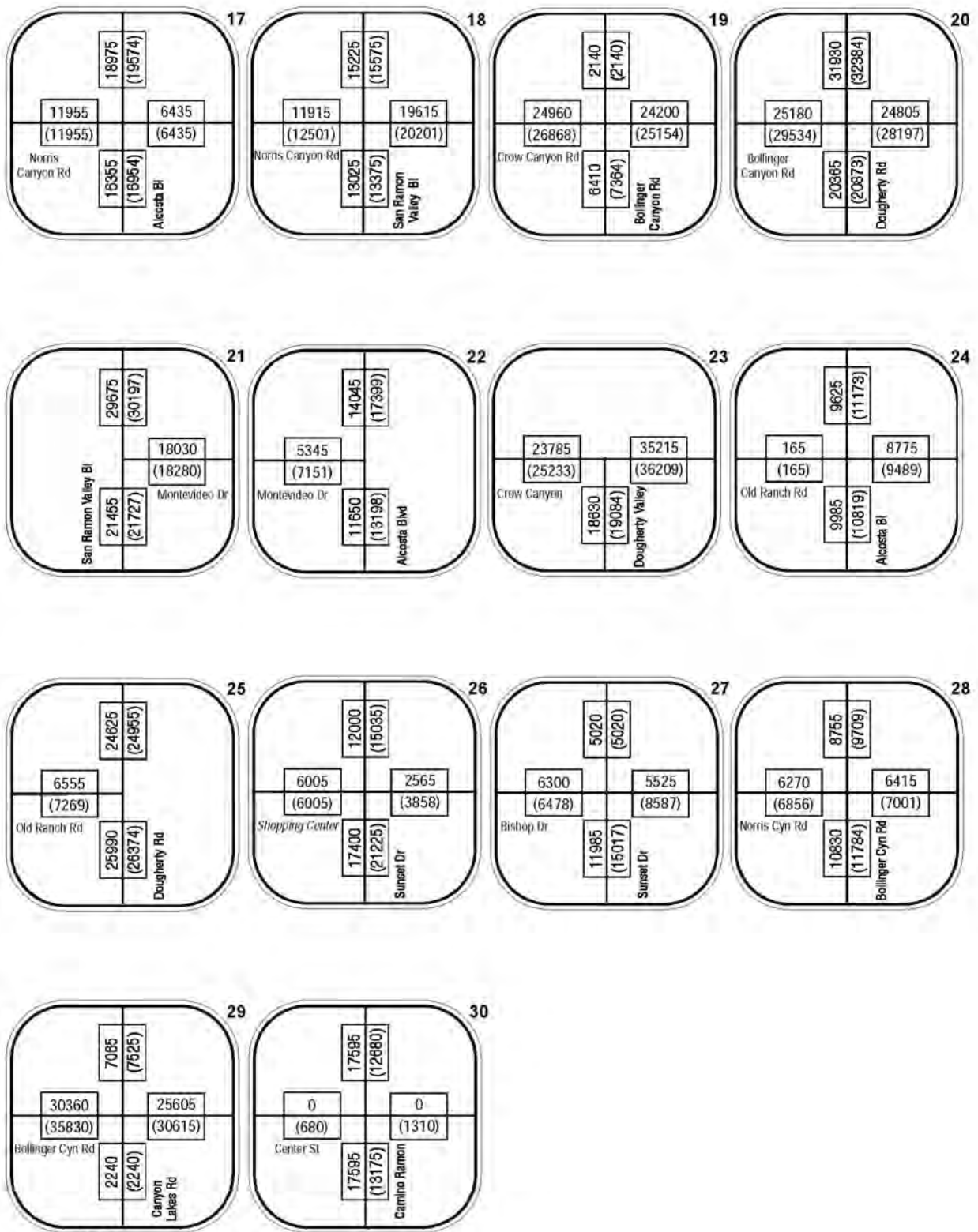


Michael Brandman Associates

24910007 • 07/2007 | 4.12-15a_2020_proj_daily_traf_vol.cdr

Exhibit 4.12-15a
 Year 2020 With Project
 Daily Traffic Volumes

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
 DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT



KEY

XXXX = Total 2020 Daily Traffic
 (XXXX) = (Total 2020 + Project Daily Traffic)

Source: DMJM HARRIS | AECOM, July 2007.



Not to Scale

Michael Brandman Associates

24910007 • 07/2007 | 4.12-15b_2020_proj_daily_traf_vol.cdr

Exhibit 4.12-15b
 Year 2020 With Project
 Daily Traffic Volumes

Table 4.12-17 (Cont.): Year 2020 Intersection Operations

Intersection	Without Project				With Project				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS		
<p>Bold denotes deficient intersection operation. * HCM unsignalized intersection analysis. ^ Future intersection associated with project. Source: DMJM Harris, 2007.</p>										

In the 2020 horizon, three intersections were assessed qualitatively. Crow Canyon Road/Crow Canyon Place would be expected to operate at the same level or better as Crow Canyon Road/Camino Ramon. Crow Canyon Road/Twin Creeks Drive would be expected to operate at the same level or better as Crow Canyon Road/San Ramon Valley Boulevard. The new HOV off-ramp intersection with Norris Canyon Road would be expected to operate at the same level or better as San Ramon Valley Boulevard/Norris Canyon Road.

Operations at one intersection would degrade to unacceptable LOS F as a result of project-generated trips:

- **Bollinger Canyon Road/Sunset Drive/Chevron Park:** The Year 2020 without project PM peak-hour LOS D would degrade to LOS F under Year 2020 with project conditions.

Operations at one intersection would remain unacceptable LOS E as a result of project-generated trips:

- **Bollinger Canyon Road/Norris Canyon Road:** The Year 2020 without project unacceptable, PM peak-hour LOS E would worsen slightly under Year 2020 with project conditions.

Mitigation is proposed that would implement intersection improvements at both intersections. Note that the previously identified Mitigation Measure TRANS-1b would sufficiently mitigate for the impact at the Bollinger Canyon Road/Sunset Drive/Chevron Park intersection. Table 4.12-18 provides a comparison of the unmitigated Year 2020 with project condition to the mitigated Year 2020 with project condition. As shown in the table, both intersections would operate at an acceptable LOS after the implementation of mitigation. Year 2020 intersection operation impacts would be less than significant.

Table 4.12-18: Year 2020 Mitigated Intersection Operations

Intersection	With Project, Unmitigated				With Project, Mitigated				V/C Ratio Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	V/C Ratio	LOS	AM	PM
12. Bollinger Canyon Road/Sunset/Chevron Park West	0.80	D	1.05	F	0.80	D	0.87	D	0.0	0.20
28. Bollinger Canyon Road/Norris Canyon Road	1.17	E	0.57	B	0.72	C	0.49	A	N/A	N/A

Source: DMJM Harris, 2007.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-2 When the improvements are warranted by the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the signalization of the intersection of Bollinger Canyon Road and Norris Canyon Road. The proposed intersection improvements are part of the City Capital Improvement Program.

Level of Significance After Mitigation

Less than significant impact.

Freeway Operations

Impact TRANS-3: The proposed project would contribute to deficient freeway ramp operations.

Impact Analysis

This impact includes both Existing Plus Project and Year 2020 conditions.

Existing Plus Project Conditions

Mainline Segments

Table 4.12-19 shows the freeway mainline analysis for Existing Plus Project conditions. While there is a slight increase in density and decrease in speed under the with project scenario, the only change in LOS occurs for northbound I-680 south of Bollinger Canyon Road in the AM peak hour and southbound I-680 north of Bollinger Canyon Road in the PM peak hour.

Table 4.12-19: Existing Plus Project Freeway Section Level of Service

Interstate 680		Peak Hour	Without Project			With Project		
Direction	Segment		LOS	Density (pc/mi/ln)	Average Speed	LOS	Density (pc/mi/ln)	Average Speed
Northbound	South of Bollinger Canyon Road	AM	E	44.7	52.4	F	*	*
		PM	E	36.0	59.0	E	38.9	56.8
Southbound	South of Bollinger Canyon Road	AM	F	*	*	F	*	*
		PM	F	*	*	F	*	*
Northbound	North of Bollinger Canyon Road	AM	C	23.1	65.0	C	23.3	65.0
		PM	C	23.7	65.0	C	24.4	64.9
Southbound	North of Bollinger Canyon Road	AM	D	30.5	62.7	D	31.2	62.3
		PM	D	34.1	60.4	E	35.0	59.7

Notes:
pc/mi/hr = passenger cars per mile per hour
*Density and average speed are not determined for LOS F.
Source: DMJM Harris, 2007.

Ramps

Table 4.12-20 shows the ramp analysis for the without and with project scenarios under Existing Plus Project conditions. While there is a slight increase in density, there is no change in LOS under the with project condition.

Table 4.12-20: Existing Plus Project Ramp LOS Analysis Results

I-680 Bollinger Canyon Road Interchange	Without Project				With Project			
	AM		PM		AM		PM	
	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)
Northbound Off-Ramp	F	*	C	20.40	F	*	C	22.90
Southbound Off-Ramp	F	*	F	*	F	*	F	*
Southbound On-Ramp	F	*	F	*	F	*	F	*
Southbound On-Ramp (loop)	F	*	F	*	F	*	F	*
Northbound On-Ramp (loop)	F	27.90	C	26.30	C	27.90	C	26.30
Northbound On-Ramp**	A	v/c = 0.26	B	v/c = 0.45	A	v/c = 0.28	B	v/c = 0.53

Notes:
pc/mi/hr = passenger cars per mile per hour
* Density not determined for LOS F.
** Only the volume capacity ratio of the ramp is provided due to the auxiliary lane configuration.
Source: DMJM Harris, 2007.

Year 2020 Conditions

Mainline Segments

Table 4.12-21 shows the freeway mainline analysis for without and with project under Year 2020 conditions. While there is a slight increase in density and a slight decrease in speed, there is no change in LOS under the with project condition.

Table 4.12-21: Year 2020 Freeway Section Level of Service

Interstate 680		Peak Hour	Without Project			With Project		
Direction	Segment		LOS	Density (pc/mi/ln)	Average Speed	LOS	Density (pc/mi/ln)	Average Speed
Northbound	South of Bollinger Canyon Road	AM	F	*	*	F	*	*
		PM	F	*	*	F	*	*
Southbound	South of Bollinger Canyon Road	AM	F	*	*	F	*	*
		PM	F	*	*	F	*	*
Northbound	North of Bollinger Canyon Road	AM	D	29.1	63.5	D	29.9	63.1
		PM	D	30.0	63.0	D	30.8	62.6
Southbound	North of Bollinger Canyon Road	AM	F	*	*	F	*	*
		PM	F	*	*	F	*	*

Notes:
pc/mi/hr = passenger cars per mile per hour
*Density and average speed are not determined for LOS F.
Source: DMJM Harris, 2007.

Ramps

Table 4.12-22 shows the ramp analysis for the without and with project scenarios under Year 2020 conditions. While there is a slight increase in density, there is no change in LOS under the with project condition.

Table 4.12-22: Year 2020 Ramp LOS Analysis Results

I-680 Bollinger Canyon Road Interchange	Without Project				With Project			
	AM		PM		AM		PM	
	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/hr)	LOS	Density (pc/mi/hr)	LOS	Density (pc/mi/ln)
Northbound Off-Ramp	F	*	F	*	F	*	F	*
Southbound Off-Ramp	F	*	F	*	F	*	F	*
Southbound On-Ramp	F	*	F	*	F	*	F	*

Table 4.12-22 (Cont.): Year 2020 Ramp LOS Analysis Results

I-680 Bollinger Canyon Road Interchange	Without Project				With Project			
	AM		PM		AM		PM	
	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/hr)	LOS	Density (pc/mi/hr)	LOS	Density (pc/mi/ln)
Southbound On-Ramp (loop)	F	*	F	*	F	*	F	*
Northbound On-Ramp (loop)	D	34.2	D	32.5	D	34.2	D	32.5
Northbound On-Ramp	A	v/c = 0.30	B	v/c = 0.54	A	v/c = 0.32	B	v/c = 0.61
Notes: pc/mi/hr = passenger cars per mile per hour *Density not determined for LOS F. **Only the volume capacity ratio of the ramp is provided, due to the auxiliary lane configuration. Source: DMJM Harris, 2007.								

Summary of Impacts

While the proposed project would not cause any mainline or ramp segment to deteriorate from an acceptable LOS to an unacceptable LOS, it would add trips to mainline and ramp segments that currently or are anticipated to operate at unacceptable levels during both the Existing Plus Project and Year 2020 scenarios. Any further deterioration of unacceptable LOS on mainline or ramp segments is considered a significant impact. Mitigating mainline and ramp impacts would require major capital improvements to I-680, which would require widening the freeway corridor for several miles beyond the limits of the study area. At the time of this writing, no local or regional transportation improvement plans identify widening the I-680 mainline beyond the existing eight lanes through the San Ramon corridor and, therefore, no local, regional, state, or federal funding exists for this improvement. Moreover, widening I-680 may require the acquisition of additional rights-of-way that could necessitate relocation of public roadways and sound walls, reconstruction of interchanges, and condemnation of private properties, among other changes. Until a nexus between the improvements to I-680 and funding is identified, widening the freeway to increase capacity is considered impracticable. Therefore, such an improvement would not be available, as mitigation and freeway impacts would be significant unavoidable impacts of the proposed project.

As a postscript, the proposed project’s trip reduction features should also be considered in context with the conclusion regarding impacts on freeway operations. The proposed project is an infill mixed-use project that would locate housing, employment opportunities, retail, civic uses, entertainment, and a transit center within a compact and focused destination. Infill mixed-use development is regarded as an effective trip-reduction strategy and is identified as a “smart growth” concept by regional agencies such as the Association of Bay Area Governments and the Metropolitan Transportation Commission.

Transportation

In addition, the proposed project would promote trip reduction through its inclusion of a transit center and its enhancement of the surrounding pedestrian and bicycle networks. The transit center would be served by the existing express bus service linking the Bishop Ranch Business Park with the Dublin/Pleasanton and Walnut Creek BART stations. The proposed project would also be served by this service as well as other County Connection bus lines. The proposed project would be located adjacent to the Iron Horse Trail, a regional Class I bicycle/pedestrian facility, which serves destinations such as downtown Walnut Creek, downtown Danville, and the Dublin/Pleasanton BART station. The project would have a direct, “crow flies” connection to the trail to provide safe and convenient access.

The proposed project would also create new cultural, entertainment, and retail opportunities in San Ramon. It would be expected that these new opportunities would primarily cater to existing unmet demand in the communities of San Ramon, Danville, and Dublin, and provide options to local residents who currently travel outside of this area to find these opportunities.

In summary, these aspects of the proposed project are expected to play a substantial role in reducing the total number of trips the proposed project would generate, including those that would use I-680. While these features would not change the residual significance of this impact, they are consistent with long-term regional transportation strategies intended to reduce traffic congestion and create alternatives to single-occupant vehicle usage.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

No mitigation is available.

Level of Significance After Mitigation

Significant unavoidable impact.

Queuing

Impact TRANS-4: The proposed project would contribute to deficient queuing under Year 2020 conditions.

Impact Analysis

A queue is a line of vehicles waiting to make a turn movement. Deficient queuing occurs when a 95th percentile vehicle queue exceeds available storage capacity. Because the proposed project would generate a significant number of trips, queuing impacts were assessed at six study intersections to determine if queues would exceed available storage.

Table 4.12-23 provides a summary of Year 2020 with project scenario queuing for both the AM and PM peak hours. The 95th percentile queue lengths are compared relative to the available storage length for each turning movement. The storage lengths shown in the table reflect project-related

improvements. These improvements include lengthening the eastbound left-turn lane on Bollinger Canyon Road at Camino Ramon from 300 feet to 500 feet by removing the existing landscaped median and adding a second westbound left-turn lane at Sunset Drive and decreasing the westbound left-turn pocket at Sunset from 360 feet to 250 feet. The available storage at these six key intersections near the project is also illustrated graphically in Exhibit 4.12-16. The lengths presented in bold indicate when the storage length is exceeded by the calculated 95th percentile queue.

Table 4.12-23: Year 2020 Queuing

No	Intersection	Movement	AM Peak Hour With Project		PM Peak Hour With Project	
			95 th (ft)	Available (ft)	95 th (ft)	Available (ft)
8	Bishop Drive at Camino Ramon	Southbound Left	30	180	147	180
		Westbound Left	25	200	98	200
		Eastbound Left	33	180	67	180
12	Bollinger Canyon Road at Sunset Drive/Chevron Park	Southbound Through-Left	247	170	218*	170
		Eastbound Left	883	600	581	600
		Westbound Left	169	250	38	250
13	Bollinger Canyon Road at Camino Ramon	Southbound Left	113	490	338	490
		Northbound Left	27	445	217	445
		Westbound Left	57	225	28	225
		Eastbound Left	416	500	278	500
14	Bollinger Canyon Road at Bishop Ranch 1 East/ Bishop Drive	Southbound Left	27	175	173	175
		Northbound Left	20	325	156	325
		Westbound Left	52	150	35	150
		Eastbound Left	6	200	15	200
26	Sunset Drive at Shops at Bishop Ranch	Southbound Left	20*	80	30*	80
		Northbound Left	122*	150	92*	150
		Westbound Left	35	100	93	100
27	Sunset Drive at Bishop Drive	Northbound Left	44	280	212	280
		Westbound Left	110	230	348	230
Notes: Bold denotes 95 th percentile queue exceeding available storage capacity, queue may be longer. Queue shown is maximum after two cycles. * Volume for 95th percentile queue is metered by upstream signal. Source: DMJM Harris, 2007.						

As shown in Table 4.12-23, deficient queuing would occur at the following three turning movements:

- **Bollinger Canyon Road/Sunset Drive/Chevron Park:** (2) southbound left (AM and PM) and (1) eastbound left (AM).
- **Sunset Drive and Bishop Drive:** (1) westbound left (PM only).

Mitigation is proposed that would implement storage capacity improvements at the intersections of Bollinger Canyon Road/Sunset Drive/Chevron Park and Bishop Drive/Sunset Drive. The mitigation is described below, along with the effectiveness of mitigating the impacts:

- **Southbound Sunset Drive at Bollinger Canyon Road:** An additional separate left-turn lane would be added where the existing median is located. With this additional lane, AM peak-hour 95th percentile queue lengths would be reduced to 132 feet and PM peak-hour 95th percentile queue lengths would be reduced to 117 feet. Both 95th percentile queue lengths could be accommodated by the 170 feet of available storage capacity.
- **Eastbound Bollinger Canyon Road at Sunset Drive:** The eastbound dual left-turn storage would be extended a distance of 900 feet back toward the interchange. With the additional storage capacity, AM and PM peak-hour 95th percentile queue lengths could be accommodated by the 900 feet of available storage capacity
- **Southbound Bishop Drive at Sunset Drive:** Re-stripe one of the westbound Bishop Drive through lanes to a left-turn lane, providing additional storage back to the West Street intersection. Add “Keep Clear” signage and pavement markings to the intersection of Bishop Drive and Parking Structure A. This would provide 370 feet of total storage capacity, which would be sufficient to accommodate 95th percentile queues.

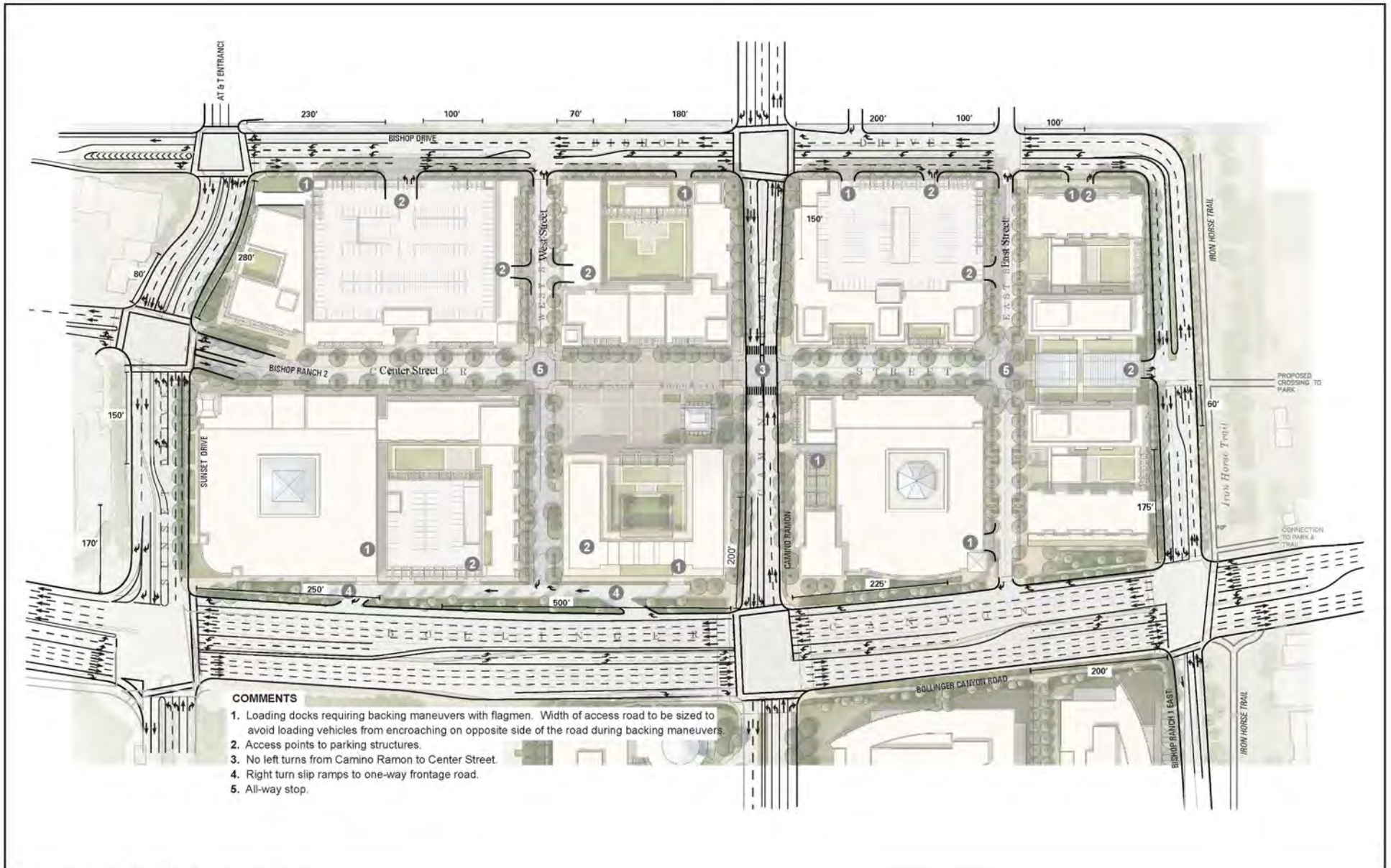
With the implementation of mitigation, all 95th percentile queues could be accommodated by available storage capacity and, therefore, all queuing impacts would be reduced to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM TRANS-4a** When the improvements are warranted based on the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the installation of a second left-turn lane on southbound Sunset Drive at Bollinger Canyon Road totaling 170 feet.
- MM TRANS-4b** When the improvements are warranted based on the City’s annual monitoring program, the project applicant shall provide pro-rata share payments to the City for the extension of a left-turn lane on eastbound Bollinger Canyon Road at Sunset Drive totaling a distance of 900 feet.



Source: DMJM HARRIS | AECOM, July 2007.



Not to Scale

Michael Brandman Associates

24910007 • 07/2007 | 4.12-16_roadway_concept_plan.cdr

Exhibit 4.12-16 Roadway Concept Plan

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

MM TRANS-4c When the improvements are warranted based on the City’s annual monitoring program, the project applicant provide pro-rata share payments to the City to re-stripe one of the westbound Bishop Drive through lanes to a left-turn lane to provide storage capacity back to West Street. As part of the re-striping, the City shall install “Keep Clear” signage and pavement markings at the intersection of Bishop Drive and Parking Structure A.

Level of Significance After Mitigation

Less than significant impact.

Parking Capacity

Impact TRANS-5: The proposed project would not provide adequate off-street parking in accordance with the requirements of the City Code.

Impact Analysis

Table 4.12-24 shows the parking demand for the various components of the project. Parking demand is calculated separately for the Plaza District and Bishop Ranch 1A and City Hall. Two adjustments to the rates are included in the table. Parking for multi-family residential is based on the number of bedrooms. One parking space is required for studios and one-bedroom units, and 2 spaces are required for two- or three-bedroom units. The exact bedroom mix has not been determined. A weighted average of 1.8 parking spaces per unit has been used. The office parking rate is also adjusted from 4 spaces per 1,000 square feet to 3.5 spaces per 1,000 square feet. This adjustment reflects the effective TDM program in place in Bishop Ranch.

Table 4.12-24: City Center Parking Analysis Parking Demand

Location	Land Use	Size	Parking Rate	Parking Demand
Plaza District	Retail	613,197 sq ft	1.0 space/250 sq ft	2,453
	Cinema	250 seats ¹	1.0 space/4 seats	63
	Multi-Family Residential	488 units	1.8 spaces ² /unit	878
	Hotel	169 rooms	1.2 spaces/room	203
	Office	50,142 sq ft	3.5 spaces ³ /1,000 sq ft	175
Plaza District Subtotal				3,772
Bishop Ranch 1A, City Hall	Office	681,769 sq ft	3.5 spaces ³ /1,000 sq ft	2,386
	Civic Center	75,150 sq ft	3.5 spaces ³ /1,000 sq ft	263
	Library	35,340 sq ft	3.0 spaces/1,000 sq ft	106
Subtotal Bishop Ranch 1A and City Hall				2,755

Table 4.12-24 (Cont.): City Center Parking Analysis Parking Demand

Location	Land Use	Size	Parking Rate	Parking Demand
Notes: ¹ The size of the cinema is 21,945 square feet and 6 screens. The City bases parking on spaces per seat. The project architect estimates the total seats at 250. ² City zoning ordinance requires 1 space per one-bedroom units and 2 spaces for two- and three-bedroom units. Weighted average of 1.8 spaces per total units used. ³ City zoning ordinance requires 4 spaces per 1,000 square feet. This requirement has been adjusted to 3.5 spaces per 1,000 square feet for Bishop Ranch to reflect the successful TDM program. Source: DMJM Harris, 2007.				

As noted in Table 4.12-24, the total parking demand of the Plaza District is 3,772 parking spaces and the total parking demand of Bishop Ranch 1A and City Hall is 2,755 parking spaces.

Table 4.12-25 shows the proposed parking supply. Parking supply is also calculated separately for the Plaza District, Bishop Ranch 1A, and City Hall.

Total parking for the Plaza District is 4,124 spaces. These spaces are allocated between the various land uses. It is expected that the residential parking and the hotel parking will be specifically designated for those uses. The 4,124 spaces are allocated into 3,068 spaces for retail and office uses, 896 spaces for residential uses, and 160 spaces for hotel uses.

The Bishop Ranch 1A parking supply totals 2,390 spaces, with 2,119 spaces in the structure and 271 surface spaces. Parking supply for the City Hall and Transit Center totals 396 total spaces, with 387 spaces in the structure and 9 surface spaces. Additionally, a new parking structure would be developed for Bishop Ranch 1 that would provide 1,300 spaces to replace the parking lost to the Bishop Ranch 1A parking structure.

Table 4.12-25: City Center Parking Analysis Parking Supply

Location	Parking Facility	Total Parking	Parking Allocation		
			Retail/Office	Residential	Hotel
Retail Complex (North Side of Bollinger Canyon Road)	Structure A	1,471	1,322	149	—
	Structure B	171	—	171	—
	Structure C	160	—	—	160
	Structure D	542	377	165	—
	On-Street-West Side	79	79	—	—
	Structure E	1,069	930	139	—
	Structure F	282	125	157	—
	Structure G	289	174	115	—

Table 4.12-25 (Cont.): City Center Parking Analysis Parking Supply

Location	Parking Facility	Total Parking	Parking Allocation		
			Retail/ Office	Residential	Hotel
<i>cont.</i>	On-street East Side	61	61	—	—
Subtotal, Plaza District		4,124	3,068	896	160
Office/Civic Center (South Side of Bollinger Canyon Road)	BR 1A Structure	2,119	2,119	—	—
	BR 1A Surface	271	271	—	—
	BR 1B Structure	387	387	—	—
	BR 1B Surface	9	9	—	—
Subtotal, Bishop Ranch 1A and City Hall		2,786	2,786	—	—
Source: DMJM Harris, 2007.					

In the Plaza District, retail/office/cinema is over-parked with a demand for 2,691 spaces and a supply of 3,068 spaces. The hotel is slightly under-parked with a demand of 203 spaces and a supply of 160 spaces. Some of the retail spaces in Parking Structure D will need to be allocated to support the hotel. This is incorporated into the proposed project as a mitigation measure. The implementation of this mitigation would ensure that potential parking impacts are less than significant.

Parking demand for both Bishop Ranch 1A and City Hall is less than available supply. Additionally a 513-space future reserve parking structure has been anticipated to address any future need. Therefore, off-street parking impacts would be less than significant.

Motorcycle Parking

The City of San Ramon Zoning Ordinance also requires motorcycle parking. Because of the unique nature of the proposed mixed-use project and shared parking concept, a mitigation measure has been added that requires the project applicant to provide a Motorcycle Parking Study, which analyzes the specific project need for motorcycle parking. The study shall identify where this motorcycle parking would be provided in each component of the project to meet the intent of the City Zoning Ordinance. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-5a The project applicant shall designate a minimum of 203 parking spaces for the use of the hotel. Spaces shall be designated with markings and signage.

Transportation

MM TRANS-5b Prior to issuance of building permits, the project applicant shall submit for review and approval of the City a Motorcycle Parking Study, identifying the location of the minimum number of motorcycle parking spaces for each project component. Each motorcycle parking space shall have minimum dimensions of 4 feet by 7 feet.

Level of Significance After Mitigation

Less than significant impact.

Roadway Safety

Impact TRANS-6: The proposed project may result in inefficient traffic patterns resulting from the provision of on-street parking on Camino Ramon.

Impact Analysis

The proposed project would allow for on-street parking on Camino Ramon between Bollinger Canyon Road and Bishop Drive during non-commute hours. During non-commute hours and on weekends and holidays, Camino Ramon would be narrowed to one through travel lane in each direction, and vehicles would be able to park on street, parallel to the curb.

However, the narrowing of Camino Ramon to two through travel lanes has the potential to create certain inefficiencies in traffic movement. Camino Ramon is the main north-south roadway serving the Bishop Ranch Business Park and provides linkages to Bollinger Canyon Road, Norris Canyon Road, and Crow Canyon Road. The existing segment of Camino Ramon between Bollinger Canyon Road and Bishop Drive currently contains four through travel lanes and has a posted speed limit of 40 miles per hour. Narrowing this roadway to two through travel lanes during the non-commute hours has the potential to create congestion and delays from reduced lane capacity and roadway obstruction from double-parked vehicles, which diminishes roadway operations. This could be a potentially significant impact.

Mitigation is proposed that would require the City of San Ramon to monitor traffic operations on this stretch of Camino Ramon after the opening of the Plaza District. If significant traffic congestion is observed, the City would be required to institute corrective measures to address the problems, up to and including entirely eliminating on-street parking on Camino Ramon. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-6a The City of San Ramon shall monitor Camino Ramon between Bollinger Canyon Road and Bishop Drive for inefficient traffic operations after Plaza District opening. Monitoring activities may include, but are not limited to, video observation, traffic counts, review of police reports, or other activities that empirically document traffic

operations. If necessary, the City shall take action through one or a combination of the following corrective measures, which shall be financed by the project applicant:

- Additional signage or street markings identifying appropriate on-street parking locations, alternate routes, or potential hazards (e.g., vehicles entering the travel lanes)
- Increased traffic enforcement
- Stationing traffic control personnel at strategic locations during peak commute times
- Public education efforts
- Increasing the hours that on-street parking is prohibited
- Entirely eliminating on-street parking

Level of Significance After Mitigation

Less than significant impact.

Emergency Access

Impact TRANS-7: The proposed project would not result in inadequate emergency access.

Impact Analysis

The City Hall component of the proposed project includes a 12,000- to 15,000-square-foot Police Department headquarters. The location of the new Police Department would allow for quick response to emergencies within the Plaza District, Bishop Ranch 1A, and City Hall components of the project, in addition to neighboring land uses such as the Shops at Bishop Ranch, Bishop Ranch 1, Bishop Ranch 3, Central Park, and the Market Place. The Police Department indicates that the new headquarters location would be more geographically centralized and would be expected to improve response times to the central and southern portions of the City, as well as to the Dougherty Valley. This is a beneficial aspect of the proposed project. Therefore, the proposed project will have adequate police response.

The proposed project is located less than 1 mile from Station 34 on Alcosta Boulevard and is located in an area where response times are within the 5-minute standard established by the San Ramon Valley Fire District and the City of San Ramon General Plan. Station 34 is staffed by two engine companies, which combined total six personnel. A tiller ladder truck with a 100-foot aerial ladder is assigned to the station and would be capable of providing response or fire suppression to the upper floors of the proposed project's structures. Station 34 also has a variety of other apparatus, including two Type 1 engines, an ambulance, and an urban search and rescue vehicle. The proposed project would not be expected to compromise fire response to surrounding land uses. Although Camino Ramon would be narrowed to two through lanes during the non-commute hours, a four-lane extension

Transportation

of Bishop Drive would intersect with Bollinger Canyon Road and would provide an alternate route around Camino Ramon for fire trucks and emergency response vehicles. Therefore, the proposed project will have adequate fire response.

For these reasons, the proposed project would not result in inadequate emergency access.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Public Transit, Bicycles, and Pedestrians

Impact TRANS-8: The proposed project would provide public transit, bicycle, and pedestrian opportunities and would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Impact Analysis

The proposed project is an approximately 2.1 million-square-foot (approximately 1.6 million net-square-foot increase above vested entitlements), mixed-use project and contains a number of design features that would create new opportunities for use of public transit, bicycle, and pedestrian modes of transportation. Each is discussed separately.

Public Transit

The proposed project would include a Transit Center adjacent to the City Hall (refer to Exhibit 3-13). The Transit Center would occupy the ground floor of the two-story parking structure and would have five bus turnouts. The Transit Center would be covered and would be located adjacent to the San Ramon Police Department headquarters, which would provide a comfortable and safe environment for transit users. The seven existing County Connection bus routes that serve the project site are expected to serve the Transit Center, including the Bishop Ranch express bus service to the Dublin/Pleasanton and Walnut Creek BART stations. Based on the trip reduction analysis discussed previously, the proposed project would generate between 100 and 150 transit trips during each of the AM and PM peak hours. Equal amounts of transit travel would also be created during hours immediately before and after the off-peak hours. Less transit traffic would be generated throughout other hours of the day. The existing San Ramon Transit Center at Executive Parkway and the Iron Horse Trail will remain in operation.

Therefore, transit impacts would be less than significant.

Bicycles

Because of its proximity to the Iron Horse Trail and the adjacency of Class II and III bike lanes on Bishop Drive and Bollinger Canyon Road, respectively, project residents, employees, and guests would be expected to regularly use bicycles. Bishop Drive currently has Class II bike lanes between Norris Canyon Road and Sunset Drive. To facilitate bicycle use, Class II bicycle lanes will be extended on Bishop Drive from their current terminus at Sunset Drive to Bollinger Canyon Road. A pedestrian/bicycle linkage will connect Bishop Drive with the Iron Horse Trail. The extension of the Class II bike lanes on Bishop Drive would close a gap in the City's bicycle circulation network and would enhance the viability of bicycle usage.

The City of San Ramon requires new development projects to provide bicycle storage facilities. Because of the unique nature of the proposed mixed-use project, a mitigation measure has been added that requires the project applicant to provide a bicycle parking study that analyzes the specific project need for bicycle parking and storage. The study shall identify where this bicycle storage would be provided in each component of the project to meet the intent of the City Zoning Ordinance. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant.

Pedestrians

The principal pedestrian feature of the Plaza District is that it is intended to be a pedestrian-oriented environment. Sidewalks would be provided along all street frontages and crosswalks on Center Street would receive a pavement treatment intended to enhance the definition of the pedestrian space. The proposed project would also provide a signalized pedestrian/bicycle crossing between the Plaza District and the Iron Horse Trail. Parking would be restricted to streets and multi-level structures, while walkways and plazas would be located in front of storefronts. On-street parking would be allowed on Camino Ramon between Bollinger Canyon Road and Bishop Drive during the non-peak hours and on weekends and holidays to enhance the pedestrian environment of the Plaza District.

Residential dwelling units in the Plaza District would be within walking distance to jobs in the Bishop Ranch Business Park, government functions in City Hall, eating and drinking establishments, entertainment venues, and recreational facilities (Central Park and the Iron Horse Trail). Given the proximity of these uses, it would be expected that many residents would find it more convenient to walk or bike instead of using a car.

Both Bishop Ranch 1A and City Hall would compliment the pedestrian-oriented environment of the Plaza District. Both components would be located on the opposite side of Bollinger Canyon Road from the Plaza District and would be within walking distance. Similar to the Plaza District, these components would also be within walking distance of neighboring land uses such as the Shops at Bishop Ranch, the Market Place, the Iron Horse Trail, and Central Park. It would be expected that many workers in Bishop Ranch 1A and City Hall would find it more convenient to walk to surrounding land uses rather than use a car.

Transportation

Two additional crosswalks would also be added to the Bollinger Canyon Road/Bishop Drive/Bishop Ranch 1 East road intersection to provide for pedestrian crossings on all four legs. All other existing crosswalks would be maintained. Pedestrian walk indications will be adjusted as necessary to accommodate the pedestrian volume and the additional roadway width associated with the implementation of the plan line for Bollinger Canyon Road.

Therefore, pedestrian impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-8a Prior to issuance of building permits, the project applicant shall submit for review and approval of the City a Bicycle Parking Study, identifying the location of the minimum number of bicycle parking spaces for each project component. Bicycle storage facilities, when feasible, shall be provided near the primary entrance of each structure they are intended to service.

Level of Significance After Mitigation

Less than significant impact.

Construction Impacts

Impact TRANS-9: The proposed project may create substantial short-term traffic, parking, and vehicular access impacts associated with construction activities.

Impact Analysis

Construction truck traffic would consist of removal of demolished buildings and infrastructure, off-haul of excavated material, and on-haul of new construction materials. Most truck trips would be expected to use I-680 and would leave and enter the freeway at Bollinger Canyon Road. Trucks would use Bollinger Canyon Road, Camino Ramon, Sunset Drive, Bishop Drive, the Bishop Ranch 1 entrance road, and the Bishop Ranch 1 East road. Daily construction truck traffic will vary by type of activity, but the maximum number of daily truck trips is estimated to be 180 round trips. Note that this estimate is consistent with the number of truck trips used in the construction air quality analysis in Section 4.2, Air Quality. Construction truck traffic has the potential to create congestion and delays, as well as hazards from trucks entering roadways and flying debris from uncovered loads.

Construction staging and vehicle parking would be provided onsite. Staging operations have the potential to obstruct roadways and parking lots. Some phases of the project would be labor intensive and may result in several hundred workers on the project site on certain days. Spill-over construction parking could adversely impact off-street parking in the Bishop Ranch Business Park, the Shops at Bishop Ranch, Central Park, the Market Place, Iron Horse Middle School, and other neighboring land uses.

Mitigation is proposed that would require the project applicant to submit a Construction Traffic, Staging, and Management Plan to the City of San Ramon for review and approval. The implementation of the plan would reduce potential impacts to a level of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-9 Prior to the commencement of construction, the project applicant shall provide a Construction Traffic, Staging, and Parking Management Plan to the City of San Ramon for review and approval. All construction contracts shall include a clause requiring compliance with the Construction Traffic, Staging, and Parking Management Plan. The plan shall include the following provisions:

- Construction truck traffic shall be limited to the following designated haul routes: Bollinger Canyon Road, Camino Ramon, Sunset Drive, Bishop Drive, the Bishop Ranch 1 entrance road, and the Bishop Ranch 1 East road. Construction truck traffic shall be prohibited on all other roadways, unless compelling circumstances warrant such movements (e.g., a major traffic accident).
- Signage shall be installed at construction truck ingress and egress points alerting motorists to such movements.
- Soil, debris, or other loose materials shall be covered with tarps or other restraining material during haul movements on roadways
- On-site and off-site construction staging and parking locations shall be identified, as well as any necessary shuttle service needed to transport workers from off-site locations. For safety reasons, off-site staging or parking shall not be allowed at Central Park or Iron Horse Middle School.
- A pre-construction conference shall be held advising all construction contractors of the requirements of the Construction Traffic, Staging, and Parking Management Plan.
- A requirement obligating the project applicant to repair any roadways damaged by construction equipment or activities.

Level of Significance After Mitigation

Less than significant impact.

4.13 - Urban Decay

4.13.1 - Introduction

This section describes the existing urban decay setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the San Ramon Urban Decay Analysis, prepared in June 2007 by Economic & Planning Systems, included in this EIR as Appendix K.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. Both the General Plan EIR and the City Civic Center EIR did not evaluate impacts related to urban decay; therefore, there is no previous analysis from which to tier. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

4.13.2 - Environmental Setting

Overview of Urban Decay

The California Environmental Quality Act (CEQA) requires that significant effects on the environment be analyzed, disclosed, and mitigated, if feasible, prior to the approval of discretionary land use approvals. The CEQA Guidelines require that both direct and reasonably foreseeable indirect physical changes be evaluated during the environmental review process. A direct physical change is one that is caused by and immediately related to the project. Examples of direct physical changes are construction-related dust, noise, and traffic. An indirect physical change is one which is not immediately related to the project but which is caused indirectly by the project. An example of an indirect physical change would be the construction of a new sewage treatment plant that provides additional wastewater treatment capacity that may facilitate population growth and may lead to an increase in air pollution.

In the context of CEQA, urban decay is considered an indirect physical impact. The development of new commercial retail space in a retail market has the potential to result in the closure of competing business, which may in turn result in vacant storefronts that meet the California Health and Safety Code definition of blight.

For the purpose of this analysis, urban decay is defined as physical deterioration that is so prevalent and substantial it impairs the proper utilization of affected real estate or the health, safety, and welfare of the surrounding community. Physical deterioration includes, but is not limited to, abnormally high business vacancies, abandoned buildings and commercial sites, boarded doors and windows, parked trucks and long-term unauthorized use of properties and parking lots, extensive gang or offensive

graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees or shrubbery, and uncontrolled weed growth or homeless encampments.

Because of the complexities of retail markets, no threshold exists for determining how much lost sales would cause a business to close. However, for the purposes of this analysis, it will be assumed that a shift in retail sales away from existing establishments of greater than 10 percent and lasting longer than 4 years may be large enough to lead to the physical abandonment of buildings. Most businesses can usually withstand a temporary sales shift of 5 to 7 percent, which is typical during a downward business cycle.

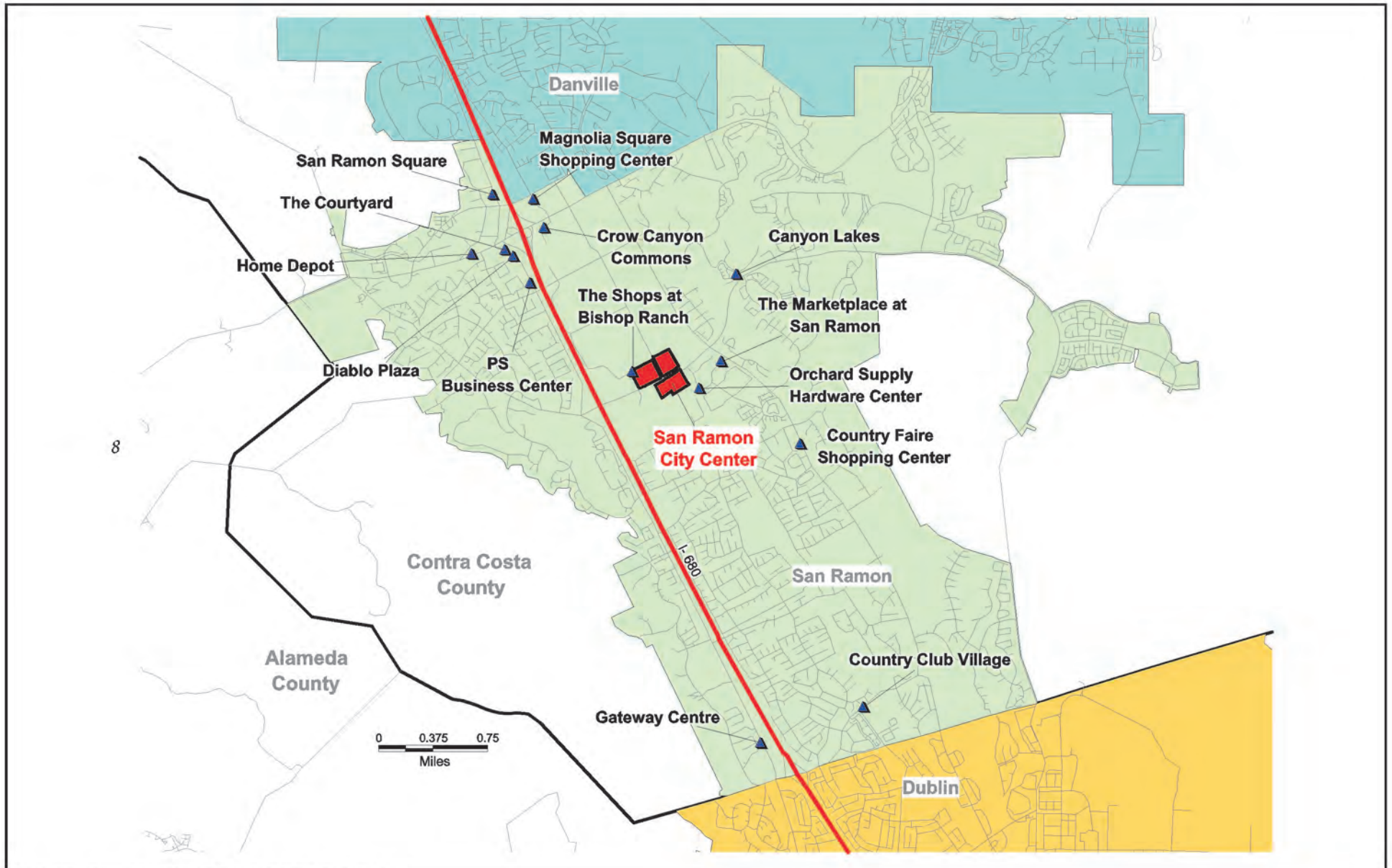
Recent California court decisions (Bakersfield Citizens for Local Control v. City of Bakersfield; Panama 99 Properties, LLC, and Castle & Cooke Commercial-CA, Inc.; as well as Anderson First Coalition, et al. v. City of Anderson, et al. and FHK Companies, et al.) have made clear that for large retail developments, an economic impact analysis should be undertaken to assess the possibility of urban decay and deterioration and indirect physical impacts on the environment.

Trade Area Setting

A Retail Trade Area is defined as a geographic area that contains the elements of demand and supply that will determine the performance of a particular retail store or project. A Trade Area is influenced by a variety of factors, including the location and density of the targeted residential population, the location of key competitors, the relative distance or travel time for each of the above, geographic and psychological barriers, and existing commute and shopping patterns. Retail establishments outside the Trade Area are not considered to be at risk of urban decay, because their primary clientele does not live in the Trade Area.

Exhibit 4.13-1 depicts the Trade Area as assumed for this study. As shown, the Trade Area is assumed to include the cities of Danville, San Ramon, and Dublin. Despite the relative proximity of such retail centers as Walnut Creek and Pleasanton, the proposed project is not expected to capture significant demand from the residents of these cities. Shoppers in these neighboring markets are less likely to travel to San Ramon from Walnut Creek or Pleasanton as their retail options are of much greater scale and scope. However, residents of Danville, San Ramon, and Dublin, many of whom currently commute to Pleasanton and Walnut Creek for shopping, are likely to be attracted by the relative proximity of the proposed project.

It is important to note that a Trade Area is also influenced by the type of tenant. Since future tenants for the proposed project have yet to be determined, however, there is a need to make simplifying assumptions. Although the precise tenanting of the proposed project is unknown, the concept is “lifestyle” oriented, catering to smaller retailers and local and regional shoppers. This type of product is not currently available in the Trade Area but does exist in the neighboring markets of Pleasanton and Walnut Creek. This further reinforces Danville, San Ramon, and Dublin as the appropriate Trade Area for this study.



Source: Economic & Planning Systems, Inc., June 2007.



Michael Brandman Associates

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Exhibit 4.13-1 Trade Area

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

The exclusion of Pleasanton and Walnut Creek from the market area is a conservative approach and justified based on several factors. First, the larger an assumed trade area, the less significant the impact of a single project is likely to be, since it will represent a smaller proportion of the total larger market and thus be overshadowed by larger economic and demographic trends. The retail markets in Walnut Creek and Pleasanton are considerably large, with the Stoneridge Shopping Center in Pleasanton totaling 1.3 million square feet of retail space and Walnut Creek's Broadway Plaza covering nearly 700,000 square feet. With the inclusion of these two cities in the Trade Area, the impact of the proposed project would appear to be quite small on a relative scale, thus overshadowing the potential impact of the project on the retail markets immediately surrounding San Ramon.

Second, the retail markets in both Pleasanton and Walnut Creek are currently very strong and unlikely to be vulnerable to urban decay from supply changes in the Trade Area. For example, annual sales of retail space at Broadway Plaza in Walnut Creek are approximately \$800 per square foot, and the center draws customers from throughout the Bay Area, including San Francisco and even remote areas of Solano and Alameda counties. The Stoneridge Shopping Center in Pleasanton, in turn, generates nearly \$500 per square foot in sales revenue per year, indicating a very healthy demand. Both centers have announced plans for expansion.

Socio-Economic Context

San Ramon is located in central Contra Costa County along the Interstate 680 (I-680) corridor between Walnut Creek and Pleasanton and has been significantly affected by growth trends throughout the larger San Francisco Bay Area. Overall, San Ramon is located in a relatively affluent market with strong population and employment growth.

In addition to serving as a bedroom community for commuters working in larger employment hubs such as Oakland and San Francisco, San Ramon continues to create a significant number of jobs. Some major private employers in the City include AT&T, Chevron, IBM, Lennar Homes, and Target. Bishop Ranch alone has a workforce of 30,000 people.

The significant growth pressures in Contra Costa County and the metropolitan regions of San Francisco have created new opportunities for retail development serving both the local population and commuters. As households and incomes increase, demand for new retail development is likely to continue to be strong over the coming decade. A further description of population, employment, and income trends in the Trade Area is provided below.

Population and Household Trends

Population and household characteristics are key determinants in the type and amount of retail demand in a particular area. Assuming average household incomes remain constant or improve over time, a growing population base will generally result in increased retail demand, providing additional market support for new and existing establishments.

Historic and projected population and household trends are shown in Table 4.13-1, using Association of Bay Area Governments (ABAG) Projections 2005 data and the City of San Ramon General Plan. Despite the economic downturn of the early 1990s, Contra Costa County as a whole has continued to grow. Significant residential growth has occurred in the Trade Area and Contra Costa County over the last ten years, and this trend is expected to continue. As shown in Table 4.13-1, the population in the Trade Area (Danville, San Ramon, and Dublin) grew by about 17 percent over the last five years and is expected to add an additional 41,900 residents between 2005 and 2020, a 30-percent increase. The trend in household growth is similar, with an expected increase of 34 percent over the same period.

The ABAG and the City of San Ramon use different assumptions about the growth in population and employment over the projected time period. The City of San Ramon General Plan projects population to grow at an average annual rate of 3.3 percent between 2007 and 2020. ABAG, on the other hand, has projected an average population growth of 2.0 percent over the same period for San Ramon. This report provides an assessment of retail market supply and demand projections based on two different population assumptions.

Income and Employment Trends

Income and employment play an important role in consumer demand for retail goods. For example, higher-income households typically demand more and a different type of retail goods than lower-income households. In addition, employment growth can have an independent effect on the type and amount of retail goods demanded through increased commuter and business-related purchases.

Income

As shown in Table 4.13-2, the 2005 mean household income in the Trade Area of \$140,434 is projected to grow to \$153,008 by 2020 in real terms (i.e., adjusted for inflation), increasing by 9 percent, or more than \$12,000 per household, according to ABAG. Overall, this represents a relatively healthy growth rate, which, if realized, could significantly boost demand for retail goods. Specifically, as household incomes continue to increase, buying power and expenditures of local households will increase as well, supporting future growth in the retail sector. These income growth projections are combined with household growth projections to estimate growth in retail sales.

Table 4.13-1: Historic and Projected Population and Household Trends

Item		Year									Average Annual Growth Rate (2007–2020)
		2000	2005	2007	2009	2010	2011	2012	2015	2020	
San Ramon General Plan Projections											
Households	San Ramon	17,991	21,121	22,520	24,012	24,795	25,603	26,437	29,108	34,171	3.3 percent
	Retail Trade Area	42,592	48,608	51,246	54,027	55,474	56,959	58,484	63,309	72,251	2.7 percent
Population	San Ramon	50,555	59,349	63,281	67,473	69,673	71,944	74,289	81,792	96,020	3.3 percent
	Retail Trade Area	123,520	145,249	154,872	165,133	164,873	170,247	175,796	184,292	204,920	2.2 percent
Association of Bay Area Governments Projections											
Households	San Ramon	16,981	19,590	20,647	21,761	22,340	22,852	23,376	25,020	27,430	2.2 percent
	Retail Trade Area	41,582	48,850	51,268	53,805	55,120	56,169	57,239	60,570	65,510	1.9 percent
Population	San Ramon	44,834	52,000	54,583	57,294	58,700	59,909	61,143	65,000	70,900	2.0 percent
	Retail Trade Area	117,799	137,900	144,090	150,558	153,900	156,529	159,202	167,500	179,800	1.7 percent
Household and population projections from San Ramon General Plan 2020. Source: Economic & Planning Systems, 2007.											

Table 4.13-2: Income and Employment Projections

Item		Year									Average Annual Growth Rate (2007–2020)
		2005	2007	2008	2009	2010	2013	2015	2018	2020	
Income (dollars)	San Ramon	137,700	139,011	139,671	140,334	141,000	143,446	145,100	148,435	150,700	0.6 percent
	Retail Trade Area	140,434	141,490	142,021	142,554	143,088	145,744	147,542	150,798	153,008	0.6 percent
Employment	San Ramon	40,110	41,577	42,331	43,099	43,880	46,099	47,640	50,007	51,650	1.7 percent
	Retail Trade Area	74,720	77,864	79,485	81,140	82,830	87,587	90,910	96,554	100,510	2.0 percent
Projections provided by ABAG Mean household income in real 2005 dollars, RTA income weighted by households. Source: Economic & Planning Systems, 2007.											

Employment Growth

Also shown in Table 4.13-2, employment in San Ramon is projected to grow 24 percent by 2020 and the Trade Area is expected to grow 29 percent over the same period. The total market area is expected to gain 22,646 jobs over the next 13 years. If realized, this employment growth will have positive implications for the retail sector, especially if it increases in-commute from other regions.

Although important, employment is not used to derive future retail demand. Instead, this analysis relies on growth in households to project retail demand, in part to avoid double counting demand by locally employed residents. To the extent that strong employment growth attracts residents from outside the Trade Area, the estimates are conservative. Based on the 2000 Census, about 25 percent of jobs in San Ramon are filled by people who live outside the Trade Area. Using employment growth to derive retail demand would include spending that is not actually taking place in San Ramon or the Trade Area. Using household growth measures the retail expenditures of the residents of the Trade Area instead of commuters.

Retail Market Conditions

The overall market conditions for retail in the Trade Area are very strong. According to brokers active in the market, vacancy rates across San Ramon, Dublin, and Danville are under 3 percent, reflecting relatively tight market supply conditions. A summary of existing supply conditions and centers is provided in Table 4.13-3 and further described below by city. In general, the presence of numerous shopping centers in the Trade Area is indicative of a relatively mature retail sector. It should be noted that each city also contains a substantial amount of additional retail not located in large shopping centers.

Table 4.13-3: Trade Area Retail Centers

City	Shopping Center	Anchor Tenants	Estimated Square Feet
San Ramon	Country Club Village	Longs Drugs, Le Asia Super Market	111,250
	The Courtyard Center/Crow Canyon	Bighorn Grill, AutoMart, Nations, 7-11	70,000
	Crow Canyon Commons	Albertson's, Rite Aid, Loehmann's	211,500
	Diablo Plaza	Jo-Ann Fabrics, Longs Drugs, Safeway, Crow Canyon Cinemas	142,000
	Gateway Centre	Albertson's, Walgreen's	110,500
	Magnolia Square Shopping Center	Office Depot, Petco	67,000
	The Market Place	Longs Drugs, Nob Hill Supermarket, Fitness 19, El Balazo, Hopyard Alehouse and Grill	182,500
	The Shops at Bishop Ranch	Whole Foods, Borders, Magnolia Audio Video, Bank of the West	96,000

Table 4.13-3 (Cont.): Trade Area Retail Centers

City	Shopping Center	Anchor Tenants	Estimated Square Feet	
<i>cont.</i>	Target (next to The Shops at Bishop Ranch)	Target Greatland	126,000 ²	
	San Ramon Square ¹	Curves, City of D'Lights, European Deli, Three Brothers From China, Madras	33,000	
	Home Depot Center	Home Depot, Staples	149,000	
	Orchard Supply Hardware Center ³	Orchard Supply	40,000	
	Country Faire Shopping Center	Local area retail	94,510	
	PS Business Center	Erik's Deli, Park Avenue Cleaners	24,600	
	Canyon Lakes ¹	Sergio's Trattoria, Yang's, Country Club Cleaners	33,325	
	Subtotal			1,491,185
Dublin	Hacienda Crossings	Best Buy, Barnes & Noble, Babies R Us, Old Navy, IMAX	470,000	
	Waterford Place Shopping Center	Safeway	134,000	
	Dublin Place Shopping Center	Target, Expo Design Center, Burlington Coat Factory, Bassett Furniture, Petsmart	206,425	
	Safeway Center	Safeway	55,000	
	Auto Dealers	Crown Chevrolet, Dublin Auto Center, Dublin Buick Pontiac GMC, Dublin Honda, Dublin Toyota, Ford of Dublin, Stoneridge Chrysler Jeep Dodge	N/A	
	Dublin Crossroads Center	Carl's Jr., Post Tools	32,527	
	Dublin Retail Center	Marshall's, Michael's, Orchard Supply Hardware, Ross	154,728	
	San Ramon Village	Albertson's	49,683	
	Shamrock Village	Dollar Tree, World of Shoes, Gallagher's Pub	85,000	
	Strouds Plaza	Strouds Linen Warehouse	56,000	
	Lamps Plus Center	Lamps Plus, Hana Japan, Country Waffle	54,000	
	Dublin Corners	Sheldan's Bakery Café, Washington Mutual	46,200	
	Other non-anchored retail			1,334,737
	Subtotal			2,678,300
Danville	Downtown District	Light retail, including books, apparel, coffee shops, and restaurants	N/A	
	Danville Livery	Piatte Restaurant, Sweet Potato	95,429	

Table 4.13-3 (Cont.): Trade Area Retail Centers

City	Shopping Center	Anchor Tenants	Estimated Square Feet
<i>cont.</i>	Sycamore Square	Albertson's, Longs Drugs	78,379
	The Village ¹	Walgreen's, Ace Hardware, Wells Fargo	25,350
	Crossroads	Radio Shack, Sushi	25,000
	Danville Square	Trader Joe's, Starbucks	30,000
	Iron Horse Plaza	Lunardi's Supermarket, Peet's Coffee, Supercuts, Blockbuster Video	14,206
	Danville Garden Shopping Center	Safeway	35,000
	Danville Town & Country	McCaulou's Department Store, Safeway	55,200
	Tassajara Crossing	Longs Drugs, Safeway	146,188
	Railroad Centre	Lyons Restaurant	25,000
	Castle Square	Costco, Marshall's	152,000
	The Village at Tassajara	Subway, Baskin-Robbins, UPS Store	30,835
		Subtotal	
Notes:			
¹ Visual estimate of square feet			
² Square feet based on average size of Target stores in California.			
Source: Economic & Planning Systems, 2007.			

San Ramon

San Ramon has a relatively large retail sector consisting of a number of shopping centers clustered along I-680. Most shopping centers in San Ramon are grocery store anchored centers supported by smaller and often local “in-line” retailers and merchants. In addition, there are several large shopping centers with major national retailers, including Home Depot, Target, Whole Foods, and Office Depot, among others. The current inventory of retail area in San Ramon is approximately 1.5 million square feet.

In addition to the listed shopping centers in the Trade Area, there is some amount of smaller retail centers and strip malls with local retailers and small shops. Individually, these shopping centers do not contribute a significant portion of retail square footage or retail sales to the larger Trade Area, but taken as a whole they can play a modest role in the market. Given vacancy rates across the Trade Area, even relatively small retail building space is in high demand. Overall, the retail market in San Ramon consists of local, neighborhood, and community shopping centers, primarily attracting customers from the local Trade Area and not from the region as a whole. The City does not currently possess a “lifestyle” center or other regional destination establishment capable of attracting customers from the broader region. Nor does San Ramon offer an expanded retail center catering to entertainment and the higher-end consumption tastes of local residents. This existing composition

was the basis of a conclusion by the San Ramon Economic Development Strategic Plan, dated July 2005, and prepared by Bay Area Economics (BAE) citing a need for this type of product. As stated in that report: "...a growing retail product type that may have potential for development in San Ramon is the 'lifestyle center,' which offers high-quality merchandise, services, and restaurant/entertainment venues in a contemporary setting."

Dublin

With approximately 2.7 million square feet of retail space, Dublin is the largest retail center within the Trade Area. Most of this development is clustered within and around the three major shopping centers in Dublin: Hacienda Crossing, Waterford Place, and Dublin Place Shopping Center. In addition, there is a large collection of automobile malls and plazas, making Dublin a Trade Area draw for automotive-related expenditures. Where noted, automobile-related expenditures are excluded from the analysis to create a more accurate comparison of the retail markets within the Trade Area and the type of retail categories most relevant to the proposed project.

Danville

The retail market in the City of Danville is mostly composed of small shops and restaurants clustered in the downtown area and along San Ramon Valley Boulevard. There are several larger retail outlets, such as Castle Square shopping center, which includes Costco and Marshalls, and the Tassajara Crossing shopping center near Blackhawk. The Downtown also includes a mix of "Mom & Pop" establishments as well as a number of niche retail chains (e.g., Trader Joe's and Lunardi's Supermarket). Nonetheless, the retail inventory in Danville is considerably smaller than its Trade Area competitors, comprising only 712,000 square feet of space.

4.13.3 - Regulatory Framework

State

California State Health and Safety Code

California State Health and Safety Code Sections 33031(a) and 33031(b) define economic and physical conditions that constitute "blight."

Economic conditions that constitute blight include:

- Depreciated or stagnant property values or impaired investments, including as a result of the presence of hazardous wastes
- Abnormally high business vacancies, abnormally low lease rates, high turnover rates, abandoned buildings, or excessive vacant lots within an area developed for urban uses and served by utilities
- A lack of necessary commercial facilities that are normally found in neighborhoods, including grocery stores, drug stores, banks, and other lending institutions

- Residential overcrowding or an excess of bars, liquor stores, or other businesses that cater exclusively to adults, which has led to problems of public safety and welfare
- A high crime rate that constitutes a serious threat to the public safety and welfare

Physical conditions that constitute blight include:

- Buildings in which it is unsafe or unhealthy for persons to live or work. These conditions can be caused by serious building code violations, dilapidation and deterioration, defective design or physical construction, faulty or inadequate utilities, or other similar factors.
- Factors that prevent or substantially hinder the economically viable use or capacity of buildings or lots. This condition can be caused by a substandard design, inadequate size given present standards and market conditions, lack of parking, or other similar factors.
- Adjacent or nearby uses that are incompatible with each other and which prevent the economic development of those parcels or other portions of the project area.
- The existence of subdivided lots of irregular form and shape and inadequate size for proper usefulness and development that are in multiple ownership.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that significant effects on the environment be analyzed, disclosed, and mitigated, if feasible, prior to the approval of discretionary land use approvals. The CEQA Guidelines require that both direct and reasonably foreseeable indirect physical changes be evaluated during the environmental review process. A direct physical change is one that is caused by and immediately related to the project. Examples of direct physical changes are construction-related dust, noise, and traffic. An indirect physical change is one which is not immediately related to the project but which is caused indirectly by the project. An example of an indirect physical change would be the construction of a new sewage treatment plant that provides additional wastewater treatment capacity that may facilitate population growth and may lead to an increase in air pollution.

In the context of CEQA, blight is considered an indirect physical impact. The development of new commercial retail space in a retail market has the potential to result in the closure of competing business, which may, in turn, result in vacant storefronts that meet the California Health and Safety Code definition of blight.

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following relevant policies related to economic development:

- **Policy 2.4-G-1:** Foster a climate in which business can prosper.
- **Policy 2.4-I-5:** Encourage, consistent with the Housing Element, housing for San Ramon's resident workforce to improve the match between local employment and local workers.
- **Policy 2.4-I-12:** Encourage retail development in mixed-use areas to create and accommodate local demand.
- **Policy 2.4-I-13:** Develop the City Center area into a cultural, recreational, and compatible retail center to ensure consistency with the recommendations of the City Center Task Force.
- **Policy 2.4-G-3:** Ensure the fiscal and financial health of the City.
- **Policy 2.4-I-19:** Encourage diverse economic growth within the City, particularly in the retail sector.
- **Policy 4.6-I-17:** Maintain neighborhood and community shopping centers of sizes and at locations that offer both choice and convenience for shoppers and residents while sustaining a strong retail base for the City.
- **Policy 4.7-I-5:** Support the direction of the City Center Task Force and the City's efforts to develop the City Center as a cohesive mix of civic, compatible retail, and open space uses with an arts and entertainment focus.
- **Policy 7.1-I-1:** Develop and implement a City Center.
- **Policy 11.10-I-4:** Promote a combination of residential, retail, and office uses in areas designated for mixed use.

4.13.4 - Methodology

Economic & Planning Systems (EPS) prepared an Urban Decay Analysis to assess the proposed project's potential retail impacts. The analysis evaluated existing and projected market conditions for the Retail Trade Area (defined as San Ramon, Danville, and Dublin) and the proposed project's potential to (1) induce urban decay through closure of competing businesses, (2) create long-term store vacancies, and (3) result in physical deterioration of properties and structures.

EPS has estimated current and projected household income and retail expenditures in San Ramon and the broader Trade Area using information obtained from the United States Census Bureau.

Population projections for the Trade Area were provided by local land use plans (e.g., the City of San Ramon General Plan) and regional population projections published by ABAG. EPS calculated retail supply in San Ramon and the Retail Trade Area using taxable sales data from the California State Board of Equalization (SBE). EPS then projected household retail expenditures in San Ramon and the broader Trade Area. Estimates of total demand were compared to estimates of existing retail sales to characterize the current level of retail capture or leakage in San Ramon and the Trade Area.

Estimates of retail expenditures are based on projected households, mean household income, and the

percent of household income spent on retail goods. Based on the projected capture/leakage estimates, EPS determined the proposed project's likelihood to cause urban decay.

4.13.5 - Thresholds of Significance

Implementation of the proposed project would result in significant urban decay impacts if it would:

- Create long-term store vacancies or result in the abandonment of buildings within the retail market served by the proposed project; or
- Result in the physical deterioration of properties or structures that impairs the proper utilization of the properties or structures, or health, safety, and welfare of the surrounding community.

4.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Year 2010 Trade Area Conditions

To assess potential urban decay impacts, the baseline Trade Area economic conditions must first be established for 2010, which is the anticipated opening year of the proposed project. Those conditions are described below.

Trade Area Supply

As part of this analysis, information was obtained about planned retail projects in the Trade Area. Table 4.13-4 provides summary information on major development projects in the pipeline in the Trade Area based on information from the cities of Danville, San Ramon, and Dublin, as well as other sources. Projected supply includes all projects built since 2005, as this is the most recent year for which baseline demand and supply data are available.

Table 4.13-4: Planned Retail Development Projects

City	Project Name	Square Feet	Type	Expected Opening Date
San Ramon	San Ramon City Center	613,042*	Lifestyle Center	2010
	The Plaza at Gale Ranch	126,000	Community Center	2007
Dublin	Dublin Corners	46,200	Shopping Center	2006
	Ulferts Corners	50,500	Shopping Center	2007
	Grafton Station and Lowe's	318,000	Shopping Center and Home Improvement	2010

Table 4.13-4 (Cont.): Planned Retail Development Projects

City	Project Name	Square Feet	Type	Expected Opening Date
<i>cont.</i>	Hacienda Drive	300,000	Lifestyle Center	2011
	Emerald Place	140,155	Lifestyle Center	2008
Danville	The Rose Garden	44,500	Lifestyle Center	2008
Total		1,868,397		
Notes: * Includes only the retail component of the proposed project; residential, office, and civic uses are excluded. Source: Economic & Planning Systems, 2007.				

As shown, approximately 1,868,000 square feet of competitive commercial space are in the pipeline in the Retail Trade Area, which represents a significant increase over current levels. For example, the addition of the proposed project raises the amount of retail space in the City by nearly 50 percent. As well, the proposed retail developments in Dublin over the next several years approach nearly 1 million square feet of space.

In addition to the proposed project, the Plaza at Gale Ranch shopping center is expected to open in the summer of 2007. The majority of projected new retail development will be in Dublin over the next five years, particularly in 2010 to 2012. After the proposed project comes on line in San Ramon, Dublin will see nearly 800,000 square feet of new retail between 2010 and 2012. The City of Danville, with a development approach that discourages large shopping centers and national retail outlets, will not see any large new construction within the projection horizon. The one current exception is the Rose Garden, a “mixed-use lifestyle center” of nearly 45,000 square feet just off I-680 on Sycamore Valley Road.

Taxable sales data from SBE was used to project the value of retail supply in San Ramon and the Retail Trade Area. As new developments come on line in the years ahead, the total level of retail in these areas will increase accordingly. Based on research of similar retail establishments, the average revenue of new retail is projected to be \$375 per square foot. Estimates for the Trade Area calculated that existing establishments sell about \$365 per square foot. However, since new retail establishments historically outperform existing retail, the estimate was increased to \$375 in order to evaluate the impact of future development under more conservative assumptions. Beginning with 2005 data, Table 4.13-5 shows the timeline of new retail development and its effect on supply in San Ramon and the Trade Area. Between 2010 and 2012, the retail supply in San Ramon increases nearly 50 percent from 2006 and the Trade Area retail supply increases more than 30 percent.

Trade Area Retail Demand

Current and projected household retail expenditures were estimated in San Ramon and the broader Trade Area and then compared to estimates of existing retail sales to characterize the current level of retail capture or leakage in San Ramon and the Trade Area. Estimates of retail expenditures are based

on projected households, mean household income, and the percent of household income spent on retail goods.

Table 4.13-6 shows the estimated expenditures on retail goods per year, based on household growth assumptions and income growth. As the number of households and household income grows in San Ramon and the Retail Trade Area, so does the amount of expenditures on retail goods. Currently, the only source of increased demand for retail expenditures is the growth in the number of households and the increased real income of those households. A key assumption in this analysis is that the percentage of income spent on retail goods and services, currently 27.0 percent, will not change. In addition, this analysis conservatively assumes that no change in demand from growth in households and income outside the Trade Area will occur.

Using projections from ABAG, Table 4.13-6 shows that households in San Ramon are estimated to spend approximately \$620 million on retail goods in 2007. Retail expenditures are projected to grow to approximately \$1.167 billion in San Ramon by 2020, based on increased population and growing real incomes. Incorporating population projections from the City of San Ramon instead of ABAG changes these numbers to \$635 million in 2007 and \$1.420 billion in 2020.

Table 4.13-5: Projected Retail Supply

Item	Year									
	2005	2006	2007	2008	2009	2010	2011	2012	2018	2020
New Retail Square Feet¹										
San Ramon	—	—	126,000	—	—	613,042	—	—	—	—
Dublin	—	46,200	50,500	140,155	—	318,000	415,000	115,000	—	—
Danville	—	—	—	44,500	—	—	—	—	—	—
Total	—	—	176,500	184,655	—	931,042	415,000	115,000	—	—
Projected Retail Supply										
San Ramon	\$554,090,000	\$554,000,000	\$601,000,000	\$601,000,000	\$601,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000
Retail Trade Area	\$1,705,000,000	\$1,722,000,000	\$1,788,000,000	\$1,857,000,000	\$1,857,000,000	\$2,207,000,000	\$2,362,000,000	\$2,405,000,000	\$2,405,000,000	\$2,405,000,000
Notes: ¹ Based on an average sales estimate of \$375 per square foot for new retail. Source: Economic & Planning Systems, 2007.										

Table 4.13-6: Projected Retail Demand

Item		Year									
		2005	2006	2007	2008	2009	2010	2012	2015	2018	2020
San Ramon General Plan Projections											
Households	San Ramon	21,121	21,809	22,520	23,254	24,012	24,795	26,437	29,108	32,048	34,171
	Retail Trade Area	48,608	49,909	51,246	52,618	54,027	55,474	58,484	63,309	68,532	72,251
Income (\$)	San Ramon	137,700	138,354	\$139,011	\$139,671	\$140,334	\$141,000	\$142,626	\$145,100	\$148,435	\$150,700
	Retail Trade Area	140,434	140,961	\$141,490	\$142,021	\$142,554	\$143,088	\$144,854	\$147,542	\$150,798	\$153,008
Projected Local Demand (\$)	San Ramon	554,090,000	593,614,193	634,620,430	677,164,285	721,303,412	767,097,632	871,150,500	1,042,752,944	1,259,987,923	1,419,849,432
	Retail Trade Area	1,705,000,000	1,780,149,853	1,857,601,456	1,937,425,311	2,019,694,074	2,104,482,633	2,321,106,487	2,673,671,113	3,096,500,760	3,403,091,550
Association of Bay Area Governments Projections											
Households	San Ramon	19,590	20,111	20,647	21,196	21,761	22,340	23,376	25,020	26,439	27,430
	Retail Trade Area	48,850	50,044	51,268	52,521	53,805	55,120	57,239	60,570	63,487	65,510
Income (\$)	San Ramon	137,700	138,354	\$139,011	\$139,671	\$140,334	\$141,000	\$142,626	\$145,100	\$148,435	\$150,700
	Retail Trade Area	140,434	140,961	\$141,490	\$142,021	\$142,554	\$143,088	\$144,854	\$147,542	\$150,798	\$153,008
Projected Local Demand (\$)	San Ramon	554,090,000	586,377,627	619,682,126	654,035,523	689,470,851	726,022,187	802,533,940	925,764,539	1,067,220,395	1,167,834,959
	Retail Trade Area	1,705,000,000	1,776,191,578	1,849,397,150	1,924,673,693	2,002,079,793	2,081,675,695	2,262,509,285	2,551,282,659	2,869,543,266	3,094,224,821
<p>Notes: Household projections from San Ramon General Plan 2020. For 2005, demand estimated from State Board of Equalization sales tax data, excluding business-to-business sales. Subsequent years based on percentage of income spent on retail, estimated at 27.0 percent. Source: Economic & Planning Systems, 2007.</p>											

Trade Area Market Capture

The market capture of a trade area is a good indicator of its relative strength and ability to capture sales from its own residents as well as sales from residents in related markets. A Trade Area capture rate is defined as total actual retail sales (from SBE data) divided by the total estimated retail expenditures of local residents. It essentially compares market demand with market supply.

As shown in Table 4.13-7, the Trade Area as a whole captures about 98 percent of the retail expenditures of its local residents. The highest capture rate is in Dublin because of the large number of retail establishments. The capture rate would be higher still if automobile sales were included, as Dublin is a major draw for automobile-related expenditures. Capture rates in San Ramon and Danville are relatively lower, as many residents travel outside these cities for retail purchases at 80 percent and 73 percent, respectively.

Table 4.13-7: Retail Trade Area Capture Rates

City	Actual Retail Sales ¹	Estimated Local Retail Expenditures ²	Capture Rate (%)
San Ramon	\$554,090,000	\$696,762,428	79.5
Dublin	\$739,366,857	\$478,023,840	154.7
Danville	\$411,393,571	\$562,673,895	73.1
Total	\$1,704,850,429	\$1,737,460,163	98.1
Notes: ¹ Based on State Board of Equalization data, adjusted for expenditures on food based on BLS estimates, excluding automobile expenditures. ² Based on Bureau of Labor Statistics, Consumer Expenditure Survey 2005, excluding automobile expenditures. Source: Economic & Planning Systems, 2007.			

To better illustrate the types of retail offered in San Ramon relative to the purchase of local residents, Table 4.13-8 lists the major retail categories and the amounts supplied based on sales data from the SBE. These calculations illustrate the concept of retail leakage by showing how much of a particular category is demanded based on certain income and demographic characteristics and whether the local market is meeting this demand. As shown, there are several categories of retail in San Ramon where local market supply does not adequately meet local demand. In particular, most automobile-related expenditures take place outside the City, and a significant amount of spending on apparel and home furnishing is done at retailers outside San Ramon. As noted above, this leakage suggests a market opportunity for retail space offering apparel and home furnishings.

Future gains in Trade Area sales will be derived from (1) growth in Trade Area population, (2) growth in Trade Area real income, and (3) increased capture from neighboring jurisdictions. To be conservative, this analysis assumes future demand is derived only from growth in population and income and not from an increased capture rate. This assumption is supported by the fact that the Trade Area as a whole already performs at a relatively balanced level with 98 percent capture rate.

However, given the “lifestyle” orientation of the proposed project, it may, in fact, capture sales currently leaking to neighboring jurisdictions.

Table 4.13-8: San Ramon Retail Capture

Retail Category	Actual Retail Sales (Supply) ¹	Estimated Retail Expenditures (Demand) ²	Capture	
			Dollars	Percent
(Dollars)				
Apparel stores	6,817,000	69,995,070	(63,178,070)	10
General merchandise	77,197,000	52,716,690	24,480,310	146
Food stores ³	115,440,000	100,927,680	14,512,320	114
Eating and drinking places	78,234,000	112,407,420	(34,173,420)	70
Home furnishing and appliances	22,665,000	56,242,890	(33,577,890)	40
Building materials and farm implements	89,205,000	17,498,768	71,706,233	510
Service stations	57,449,000	150,000,630	(92,551,630)	38
Other retail stores	107,083,000	136,973,280	(29,890,280)	78
Totals	554,090,000	696,762,428	-142,672,428	80
Notes:				
¹ State Board of Equalization, Taxable Sales. 2005 data.				
² Bureau of Labor Statistics. 2005 data.				
³ Adjusted to reflect both taxable and non-taxable food expenditures.				
⁴ Automobile expenditures excluded from both supply and demand calculations.				
Source: Economic & Planning Systems, 2007.				

Summary of Year 2010 Baseline Market Assumptions

To evaluate the proposed project’s potential retail impact, baseline conditions for Year 2010 were estimated. Baseline market conditions provide the context for understanding potential impacts and serve as the basis for several key assumptions used in this analysis, as described below.

Trade Area Vacancy Rate

The previous chapter found that current conditions in the Trade Area retail market are extremely favorable, with an overall vacancy rate equal to or less than 3 percent. The vacancy rate in San Ramon is estimated at about 3.75 percent. A vacancy rate of this level suggests that available retail space is a result of frictional changes in the retail market, typically caused by normal tenant turnover rather than structural over-supply. It is not unusual for retail businesses to expand or contract in response to changing market conditions and thus seek out retail space that better accommodates customer demands. A high vacancy rate, in contrast, could suggest a market more vulnerable to conditions that lead to urban decay (e.g., physical deterioration of property because of deferred maintenance and abandonment).

Trade Area Capture Rate

The Trade Area is currently exhibiting a relatively balanced market capture rate. Specifically, Trade Area retail establishments are capturing about 98 percent of taxable retail sales potential of its local residents, excluding auto purchases. The market impact calculations provided in this analysis assume that the Trade Area retail capture from other jurisdictions will remain constant. The capture rate in San Ramon is approximately 80 percent.

Average Trade Area Sales per Square Foot

This analysis relies on a single, average annual sales per square foot assumption, based on retail sales in the Trade Area and the total square feet of retail inventory. As of 2005, the most recent year for which adequate data are available, the overall sales per square foot in the Trade Area was about \$365. As previously noted, this figure has been increased to \$375 per square foot to account for higher sales experienced by newer retail developments relative to existing retail developments.

Future Trade Area Retail Development

Based on information provided by Trade Area cities, there will be approximately 1.9 million new square feet of retail in the Trade Area over the next 10 years, including the 635,000 square feet of retail in the proposed project.

Store Closure and Long-Term Vacancies

Impact UD-1: Development of the proposed project would not result in closure of competing business that would create long-term store vacancies in the Trade Area.

Impact Analysis

The potential of the proposed project causing store closure and long-term vacancies is evaluated in this impact. To determine the potential for store closure and long-term vacancies, the proposed project's retail impact must first be quantified. Once the retail impact is determined, the potential for store closure and long-term vacancies can be assessed. As such, this impact discussion is divided into two sections to reflect this analytical approach.

Project Retail Impact

The impact of the proposed project is evaluated by comparing long-term market demand and supply projections using the assumptions described above. Future Trade Area demand and supply balances for retail sales were calculated as a whole rather than by retail category, given the lack of information on the precise tenant mix in the proposed project.

Table 4.13-9 summarizes the potential effects of the proposed project on the Trade Area retail market by adding its additional sales and square feet to the status quo demand and supply balance for select years between 2005 and 2020. The "status quo" 2005 demand level is based on actual sales data adjusted to real 2005 dollars, as reported by the SBE for 2005. Incremental growth in demand beyond 2005 is assumed to come from population growth and income in the Trade Area only and not from additional capture from other jurisdictions, as noted above. As population and income increase,

the total amount of disposable income in the Trade Area generates increased taxable sales for all retail categories. Additional demand is calculated by multiplying the Trade Area population and income growth by the estimated expenditures per household.

Table 4.13-9: Supply and Demand Comparison

Item		Amount by Year (2005 Dollars)								
		2005	2008	2009	2010	2011	2012	2013	2015	2020
City of San Ramon Projections										
Projected Retail Supply	San Ramon	\$554,090,000	\$601,000,000	\$601,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000
	Retail Trade Area	\$1,705,000,000	\$1,857,000,000	\$1,857,000,000	\$2,207,000,000	\$2,362,000,000	\$2,405,000,000	\$2,405,000,000	\$2,405,000,000	\$2,405,000,000
Projected Retail Demand	San Ramon	\$554,090,000	\$677,164,285	\$721,303,412	\$767,097,632	\$818,140,691	\$871,150,500	\$926,202,838	\$1,042,752,944	\$1,419,849,432
	Retail Trade Area	\$1,705,000,000	\$1,937,425,311	\$2,019,694,074	\$2,104,482,633	\$2,221,031,709	\$2,321,106,487	\$2,434,823,632	\$2,673,671,113	\$3,403,091,550
Supply and Demand Balance	San Ramon	\$0	\$76,164,285	\$120,303,412	-\$63,902,368	-\$12,859,309	\$40,150,500	\$95,202,838	\$211,752,944	\$588,849,432
	Retail Trade Area	\$0	\$80,425,311	\$162,694,074	-\$102,517,367	-\$150,968,291	-\$83,893,513	\$29,823,632	\$268,671,113	\$998,091,550
Required Sales Reduction of Existing Establishments	San Ramon	—	13.75%	21.71%	-11.53%	-2.32%	7.25%	17.18%	38.22%	106.27%
	Retail Trade Area	—	4.72%	9.54%	-6.01%	-8.85%	-4.92%	1.75%	15.76%	58.54%
Association of Bay Area Governments Projections										
Projected Retail Supply	San Ramon	\$554,090,000	\$601,000,000	\$601,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000	\$831,000,000
	Retail Trade Area	\$1,705,000,000	\$1,857,000,000	\$1,857,000,000	\$2,207,000,000	\$2,362,000,000	\$2,405,000,000	\$2,405,000,000	\$2,405,000,000	\$2,405,000,000
Projected Retail Demand	San Ramon	\$554,090,000	\$654,035,523	\$689,470,851	\$726,022,187	\$763,735,019	\$802,533,940	\$842,450,226	\$925,764,539	\$1,167,834,959
	Retail Trade Area	\$1,705,000,000	\$1,924,673,693	\$2,202,079,793	\$2,081,675,695	\$2,170,962,885	\$2,262,509,285	\$2,356,372,060	\$2,551,282,659	\$3,094,224,821

Table 4.13-9 (Cont.): Supply and Demand Comparison

Item		Amount by Year (2005 Dollars)								
		2005	2008	2009	2010	2011	2012	2013	2015	2020
Supply and Demand Balance	San Ramon	\$0	\$53,035,523	\$88,470,851	-\$104,977,813	-\$67,264,981	-\$28,466,060	\$11,450,226	\$94,764,539	\$336,834,959
	Retail Trade Area	\$0	\$67,673,693	\$145,079,793	-\$125,324,305	-\$191,037,115	-\$142,490,715	-\$48,627,940	\$146,282,659	\$689,224,821
Required Sales Reduction of Existing Establishments	San Ramon	—	9.57%	15.97%	-18.95%	-12.14%	-5.14%	2.07%	17.10%	60.79%
	Retail Trade Area	—	3.97%	8.51%	-7.35%	-11.20%	-8.36%	-2.85%	8.58%	40.42%

Notes:
 The Retail Trade Area (RTA) includes the cities of San Ramon, Danville, and Dublin.
 Demand in 2005 is based on actual retail sales. Demand in subsequent years equals 2005 demand plus new retail expenditures by local residents.
 Source: Economic & Planning Systems, 2007

The calculations shown in Table 4.13-9 assume 2005 is the status quo, or base year against which future impacts to the market are compared. As noted earlier, the Trade Area is capturing approximately 98 percent of the sales potential in this year (excluding autos), although San Ramon's capture rates is significantly lower. When the proposed project enters the market in 2010 and future retail developments in Dublin come on the market, the supply and demand balance will change. In 2009, households in the Trade Area will demand \$2.0 billion in retail goods, while the supply of retail goods in the Trade Area is only \$1.857 billion, implying a small supply deficit, or about \$145 million in unmet demand. As more retail establishments come on the market through 2012, the amount of retail supplied will exceed the amount demanded, assuming no additional capture from outside the Trade Area, such as Pleasanton, Livermore, or Walnut Creek. (As noted, this is a conservative assumption, since, in reality, the proposed project may attract customers from neighboring markets.)

One year after the proposed project is completed, the Trade Area will have \$191 million of excess supply. This means certain stores may lose business until there are more people (and income) in the Trade Area. Based on the analysis of retail demand, retail establishments in the Trade Area may have an average decrease in sales of 6.6 percent over three years (General Plan) or 7.4 percent over four years (ABAG) beginning in 2010, in order to absorb new retail in the City. However, this possible short-term imbalance in the retail market will be mitigated in a relatively short time, about three to four years following the construction of the proposed project, at which time demand will far exceed supply. In addition, the analysis calculates retail demand based on the growth in households in San Ramon. Projecting retail demand based on employment growth would result in a rosier picture for retail demand in San Ramon.

Potential for Store Closures and Long-Term Vacancies

The proposed project would add supply to the retail market in San Ramon and the Trade Area. The more net square feet that are added to the Trade Area above baseline conditions, the greater the sales shift from existing retailers, and the greater the potential for retail stores to close. Consequently, a number of existing retail tenants—especially those that compete directly with the yet unknown businesses that would tenant the proposed project—will face competitive pressures. However, these pressures will be mitigated in a relatively short time, with retail demand and supply balancing within one to two years. Based on the analysis of the previous chapters and the urban decay assumptions described above, the proposed project is unlikely to precipitate store closures or long-term vacancies in San Ramon or the Trade Area. This conclusion is supported by the following considerations:

- **Strong Retail Market Conditions in the Trade Area:** Retail market conditions in the Trade Area are very strong, as discussed in previous chapters. Total annual retail demand in the Trade Area is expected to reach about \$2.62 billion by 2012, two years after retail opens at the proposed project, an increase of about 22 percent from 2007 levels.
- **Supportable Sales Shift Impact:** The net impact of the shift of sales required to support the proposed project would be nearly eliminated by 2013, or within about three years after the

opening of the project, because of steadily rising population and income in the Trade Area (see Table 4.13-7). The overall strength in the retail market suggests that any short-term vacancies that result should be absorbed by other tenants in a relatively short time. Thus, property owners will have a financial incentive to maintain their properties and avoid conditions conducive to urban decay.

- **Increased Capture from Adjacent Markets:** The above analysis assumes that the Trade Area capture rate from adjacent markets remains constant over the study period. This assumption is conservative because the Trade Area currently captures about 98 percent of local demand and San Ramon captures nearly 80 percent of retail sales. To the extent that particular retail tenants can attract a significant proportion of their customers from adjacent markets, the impact on existing Trade Area businesses might be reduced.
- **Repositioning of Properties to Non-retail Uses:** The analysis presented herein relates to the demand for property currently used and zoned for retail uses only. However, individual landowners may be able to avoid conditions conducive to urban decay (e.g., long-term vacancies) if they can readily convert their property to other more marketable or lucrative uses (e.g., residential, industrial, or office). Currently, the zoning of retail property in San Ramon is mixed-use, meaning it can be used for non-retail purposes. In other words, these properties would be relatively easy to convert to alternative uses in the unlikely event that the local retail market experiences prolonged decline.
- **Entrepreneurialism and Market Adaptation:** Retail is a highly competitive and adaptable sector that is affected by a variety of evolving trends, including consumer preferences, demographics, travel patterns, technology and innovation (e.g., online shopping), as well as commodity production and distribution markets. Individual tenants or property owners will respond to these trends with varying degrees of success, depending upon their entrepreneurial skills, local planning and business development efforts, and other factors. These factors, although intangible and difficult to predict, can improve the performance of the retail sector beyond what might be expected based on population and income growth projections alone.

It can be concluded that the above findings suggest that the risk of urban decay from the proposed project is minimal. Even if the potential impacts described above manifest themselves, the effect would be short-lived and relatively modest (an average of 7.4 percent over 4 years for the Trade Area), under the worst-case scenario. Urban decay becomes a possibility when sales declines are deep and last for a prolonged period of time, typically five years or more. This is not the case with the proposed project, as the excess retail supply will be overcome by increased demand from population and income growth in a very short time, in this case about four years. Therefore, potential impacts related to store closure and long-term vacancies would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Cumulative Retail Impacts

Impact UD-2: Development of the proposed project and other planned retail projects would not result in the closure of competing businesses to the extent that it would result in urban decay.

Impact Analysis

Table 4.13-10 provides a summary of the estimated sales shifts existing retail establishments between 2010 and 2020, after the proposed project and other planned retail projects come online. Existing businesses in the Trade Area would experience relatively minor sales shifts to new retail developments between 2010 and 2013. By 2015, existing businesses and planned retail projects would experience a net increase in retail sales. Existing businesses in San Ramon would experience significant shifts in 2010 and 2011 and a minor shift in 2012. By 2013, existing businesses and planned retail projects would experience a net increase in retail sales.

Table 4.13-10: Cumulative Retail Impacts

Year	Estimated Sales Shifts From Existing Establishments (percent)	
	Trade Area	San Ramon
2010	-7.35	-18.95
2011	-11.20	-12.14
2012	-8.36	-5.14
2013	-2.85	2.07
2015	8.58	17.10
2020	40.42	60.79

Source: Economic & Planning Systems, 2007.

As new retail space is added to both the Trade Area and San Ramon supply inventory, a temporary imbalance in the retail demand and supply conditions relative to the status quo will be created. This imbalance is expected to reverse itself within two years and is consistent with normal business cycle fluctuations. Continued growth in retail demand associated with increased Trade Area population and income will minimize the impact of any sales shift from existing businesses that might result from new development in a relatively short time. By 2014, four years after the opening of the proposed project, the decline in retail sales of existing establishments needed to accommodate new development would be eliminated because of expanding population and income.

Moreover, current retail market conditions in the Trade Area are highly favorable, with population and income growth expected to continue to provide a healthy source of new retail demand. Demographic projections indicate a steady annual increase in population (3.30 percent), employment (2.00 percent), and income (0.60 percent) in the Trade Area over the next 10 years. In addition, existing retail vacancy rates across the Trade Area are approximately 3.00 percent, with a 3.75-percent vacancy rate in San Ramon, indicating extremely tight market conditions. Although overall market conditions in the Trade Area are healthy, 1.9 million square feet of new retail space are expected to come online within the 2010 to 2012 period, providing increased competition for existing retailers.

Because of strong and growing retail market conditions in the Trade Area, properties that are adversely affected by increased competition from the proposed project are likely to successfully reposition themselves in a relatively short time, thus avoiding conditions conducive to urban decay. The potential sales shift averaging approximately 7.4 percent over four years, is neither deep nor prolonged enough to lead property owners to neglect their properties. The potential decrease in sales over this period is no more severe than the normal fluctuations of a typical business cycle. Thus, property owners would have a financial incentive to maintain their properties with the realistic expectation of benefiting from a generally healthy and growing market.

For these reasons, the proposed project, in conjunction with other planned retail projects in the Trade Area, would not be reasonably expected to result in cumulative retail impacts that create urban decay conditions. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

4.14 - Utility Systems

4.14.1 - Introduction

This section describes the existing setting regarding utility systems and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Preliminary Hydrology Report prepared in April 2007 by RBF Consulting, the Water Supply Assessment prepared by East Bay Municipal Utility District, the East Bay Municipal Utility District 2005 Urban Water Management Plan, and the Development Capacity Analysis prepared by the Central Contra Costa Sanitary District. The Preliminary Hydrology Report is included in this EIR as Appendix H, the Water Supply Assessment is contained in Appendix J, and the Development Capacity Analysis in Appendix H.

As explained in Section 1, Introduction, where applicable, this project-level Draft Subsequent Environmental Impact Report (DSEIR) tiers off and incorporates by reference information and analysis contained in the City of San Ramon General Plan EIR and the San Ramon City Civic Center EIR, certified by the San Ramon City Council in 2001 and 2003, respectively. The General Plan EIR contemplated buildout of the General Plan at a programmatic level and concluded that all impacts on utility systems were less than significant after mitigation in Section 4.6 of the document. The City Civic Center EIR provided project-level analysis of the smaller and less intense City Civic Center project and concluded that all utility system impacts were less than significant after mitigation in Section 4.8 of the document. This DSEIR also incorporates by reference the City of San Ramon Zoning Ordinance Final Negative Declaration and the Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration, both of which were certified by the San Ramon City Council in 2006.

This DSEIR accounts for modifications to the baseline conditions that have occurred since certification of the previous EIRs and changes that have increased the size and intensity of the proposed project. Accordingly, not all of the conclusions in the previous EIRs are applicable to the proposed project and new analysis is provided for potential impacts not previously considered in those documents.

4.14.2 - Environmental Setting

Potable Water

East Bay Municipal Utility District (East Bay MUD) provides potable water supply and distribution to a 325-square-mile service area in Alameda and Contra Costa Counties with a population of 1.3 million. The service area includes 20 cities and 15 unincorporated communities, stretching from San Lorenzo in the south, to Crockett in the north, to Pleasant Hill and San Ramon in the east. East Bay MUD is an independent public utility agency governed by an elected seven-member board of directors.

East Bay MUD delivered more than 77 billion gallons of potable water to customers within its service area in 2006, for an average of 211 million gallons per day (mgd). This represented a 3.3-percent increase over its 2005 deliveries of 74 billion gallons of water. Below is a description of East Bay MUD's distribution and water supply sources.

Distribution System

East Bay MUD's distribution and storage system consists of 4,085 miles of pipelines and 833 million gallons of storage capacity. East Bay MUD operates five terminal reservoirs: Briones, Chabot, Lafayette, San Pablo, and Upper San Leandro.

Potable water destined for San Ramon is treated at the Walnut Creek Water Treatment Plant and conveyed south down a transmission line within the Iron Horse Trail right-of-way through Alamo and Danville. In 2006, East Bay MUD completed a \$180 million project to improve water quality and reliability along the main transmission line. The project consisted of capacity expansion and seismic upgrades at Walnut Creek Water Treatment Plant, upgrading a pumping plant in Alamo, and installing four miles of water pipeline in Walnut Creek and Alamo.

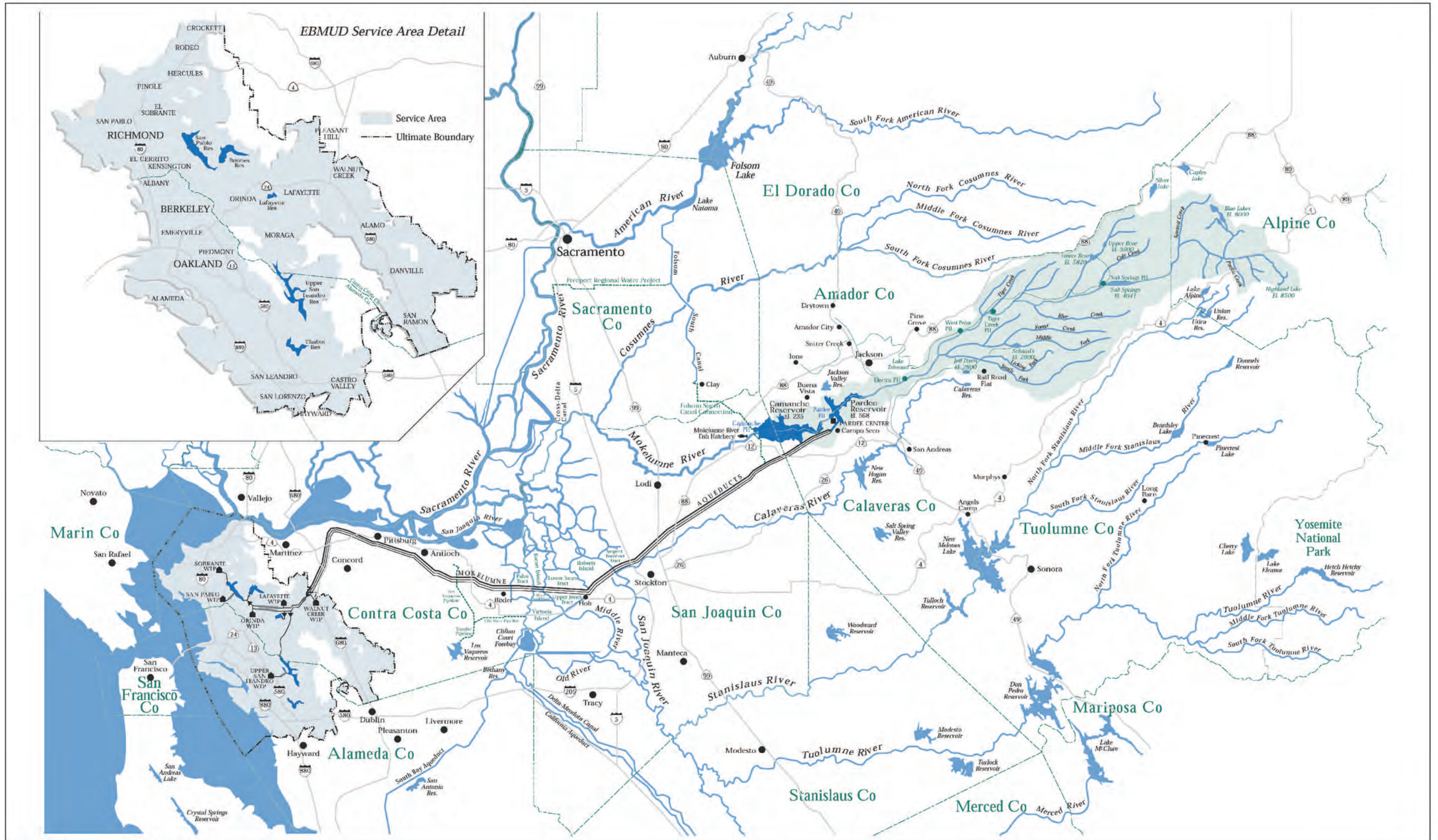
East Bay MUD provides water to San Ramon customers from four pressure zones that correspond to elevation ranges. The project site is within the Amador Pressure Zone (450 to 650 feet). Bishop Ranch 2 and Parcels 1A and 1B have existing connections to the East Bay MUD distribution system.

Seismic Improvement Program

East Bay MUD commenced a \$202 million Seismic Improvement Program in 1995 to strengthen its water system to withstand earthquakes and improve post-earthquake fire fighting capability. The Seismic Improvement Program includes replacement or upgrades to existing distribution and storage facilities and the construction of new facilities. As part of the program, East Bay MUD completed the 11-mile Southern Loop pipeline between San Ramon and Castro Valley in 2002. The Southern Loop is an emergency bi-directional pipeline that provides operational redundancy to serve either side of the East Bay Hills. In addition, East Bay MUD has seismically upgraded, replaced, or decommissioned 70 of 74 local water reservoirs. East Bay MUD has also performed seismic upgrades at its treatment plants.

Water Supply

East Bay MUD obtains approximately 90 percent of its water supply from the Mokelumne River watershed in Alpine, Amador, and Calaveras counties in the Sierra Nevada Mountains. The remaining 10 percent is provided by local runoff collected in its five terminal reservoirs. Each water supply source is discussed below. Exhibit 4.14-1 depicts the East Bay MUD terminal reservoir capacities.



Source: East Bay Municipal Utility District, February 2003.

Mokelumne River

East Bay MUD's Mokelumne River supply facilities include Pardee Dam near Jackson in the Sierra Foothills and Comanche Dam, located 10 miles downstream. Water is diverted from the Mokelumne River at Pardee Dam to the three Mokelumne Aqueducts, which bring untreated water 90 miles west to the East Bay MUD service area. Pardee Dam opened in 1929 and has a maximum capacity of 197,950 acre-feet. Comanche Dam opened in 1964 and has a maximum capacity of 417,120 acre-feet. Note that Comanche Dam does not provide water to the East Bay MUD service area; rather it functions to regulate the release of water downstream for other beneficial uses such as flood control, irrigation, downstream water rights holders, and environmental protection.

East Bay MUD has existing entitlements to a maximum of 325 mgd of Mokelumne River water. However, East Bay MUD's ability to use the full allotment is restricted by a number of factors, including upstream water use by prior rights holders, downstream water use by riparian and senior appropriators and other downstream obligations (e.g., environmental), and variability in rainfall and runoff.

Untreated water from Mokelumne River is of high quality and requires minimal treatment. East Bay MUD has purchased conservation easements in the Mokelumne River watershed upstream of Pardee Dam to prevent the potential for the introduction of agricultural or urban runoff into the reservoir.

Mokelumne Aqueducts

The Mokelumne Aqueducts are comprised of three steel pipes that were developed over a 34-year period. Aqueduct No. 1 is 5 feet, 5 inches in diameter and went online in 1929; Aqueduct No. 2 is 5 feet, 7 inches in diameter and went online in 1949; Aqueduct No. 3 is 7 feet, 3 inches in diameter and went online in 1963. Collectively, the three aqueducts have a gravity flow capacity of 200 mgd and up to 325 mgd with pumping at the Walnut Creek Treatment Plant.

East Bay MUD has partnered with five reclamation districts responsible for levees to prevent failure and flooding where elevated sections of the Mokelumne Aqueducts cross the Delta. The \$10 million, multiyear program will bring levees to United States Army Corps of Engineers agricultural levee standards. East Bay MUD has contributed \$6.6 million to date.

Terminal Reservoirs

East Bay MUD operates five terminal reservoirs: Briones, Chabot, Lafayette, San Pablo, and Upper San Leandro. Briones, San Pablo, and Upper San Leandro supply water throughout the year, while Chabot and Lafayette serve as emergency sources of supply. These reservoirs also collect local runoff in their respective watersheds. The 2005 Urban Water Management Plan indicates that local runoff provides 15 to 25 mgd of supply. The reservoirs are operated to maintain a 180-day supply of standby storage. Table 4.14-1 provides a summary of each reservoir.

Table 4.14-1: Terminal Reservoir Summary

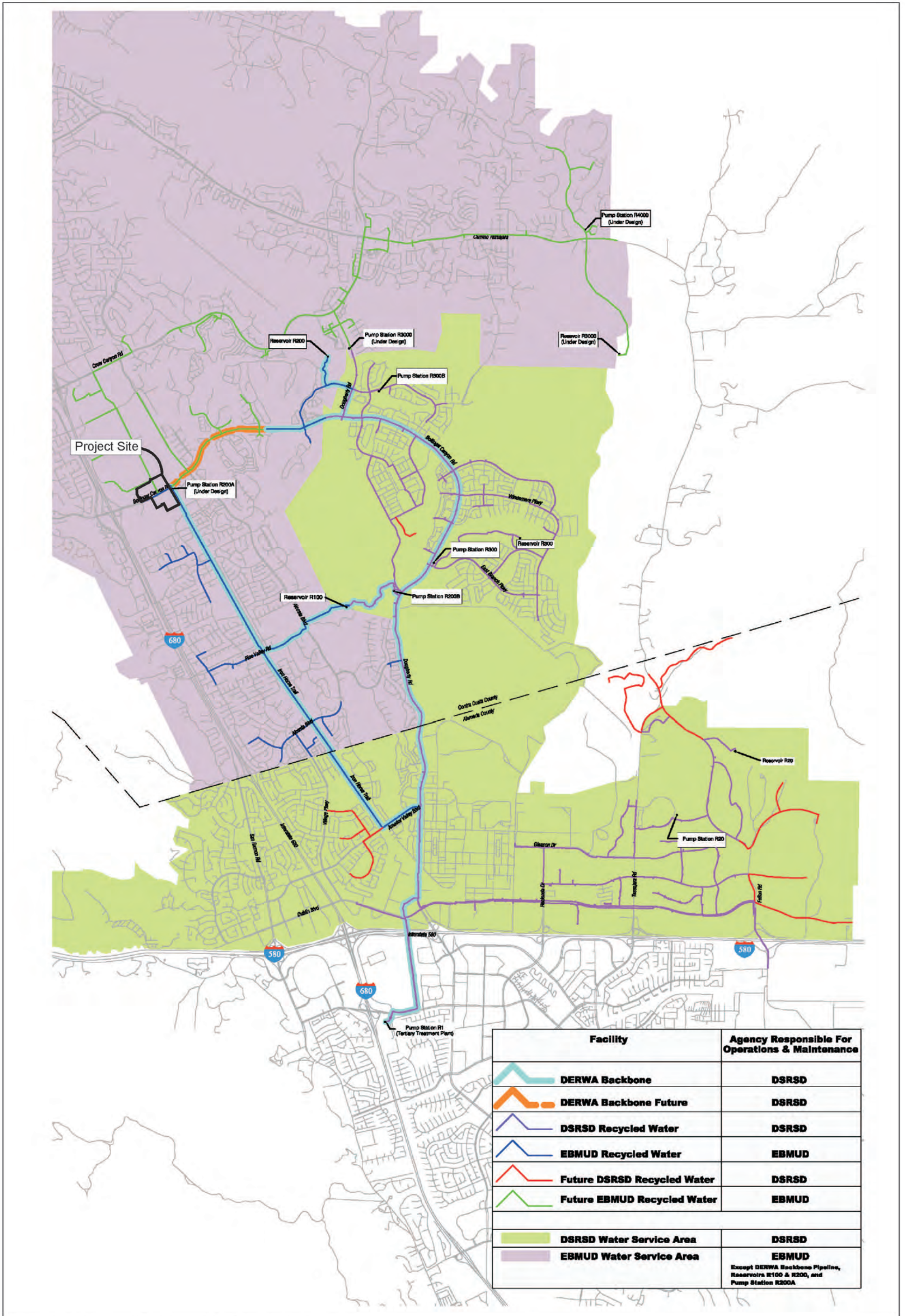
Terminal Reservoir	Capacity (acre-feet)	Water Sources
Briones	60,500	Mokelumne Aqueducts; Bear Creek
Chabot	10,400	Mokelumne Aqueducts; San Leandro Creek; Upper San Leandro Reservoir; Miller Creek
Lafayette	4,300	Lafayette Creek
San Pablo	38,600*	Mokelumne Aqueducts; San Pablo Creek; Bear Creek; Briones Reservoir
Upper San Leandro	38,000	Mokelumne Aqueducts; San Leandro Creek and tributaries
Total	151,800	
Notes: * Capacity has been temporarily restricted to 24,200 acre-feet until seismic upgrades are complete Source: East Bay Municipal Utility District, 2005.		

East Bay MUD is currently in the process of implementing seismic improvements to San Pablo Reservoir, which originally was constructed in 1920 and upgraded in 1967 and 1979. A portion of the reservoir is enclosed by an earthen embankment. A 2003 study of the embankment's seismic stability indicated that a major earthquake on the Hayward Fault could result in failure and cause an uncontrolled release of water into the Sobrante Valley. Subsequently, East Bay MUD lowered the reservoir level by 20 feet until seismic upgrades of the embankment were complete. The seismic upgrades are scheduled to begin in 2007. East Bay MUD is also evaluating the seismic stability of the Chabot and Lafayette reservoirs.

Recycled Water

East Bay MUD and the Dublin San Ramon Services District (DSRSD) jointly provide and distribute recycled municipal water in San Ramon through the San Ramon Valley Recycled Water Program. The program is administered by a joint powers authority DSRSD-East Bay MUD Recycled Water Authority (DERWA). The first phase of the program was completed in 2006 and provides 23 sites, including greenbelts, parks, and schools, with a total of 700,000 gallons per day of recycled water. When completed, the program will supply 2.4 mgd to parts of San Ramon, Danville, and Blackhawk.

Treated effluent at the R1 tertiary treatment plant in Pleasanton is filtered and disinfected for appropriate irrigation reuse. Recycled water is conveyed to central San Ramon via a backbone line located within the Iron Horse Trail right-of-way. The backbone line currently extends as far north as Bollinger Canyon Road. Future plans identify a network of recycled water lines serving the Bishop Ranch office park. Exhibit 4.14-2 depicts the existing and planned San Ramon Valley Recycled Water Program system.



Facility	Agency Responsible For Operations & Maintenance
DERWA Backbone	DSRSD
DERWA Backbone Future	DSRSD
DSRSD Recycled Water	DSRSD
EBMUD Recycled Water	EBMUD
Future DSRSD Recycled Water	DSRSD
Future EBMUD Recycled Water	EBMUD
DSRSD Water Service Area	DSRSD
EBMUD Water Service Area	EBMUD Except DERWA Backbone Pipeline, Reservoirs R100 & R200, and Pump Station R200A

Source: DERWA San Ramon Valley Recycled Water Program, March 2007.



Michael Brandman Associates

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Exhibit 4.14-2 San Ramon Valley Recycled Water Program Facilities

CITY OF SAN RAMON • SAN RAMON CITY CENTER PROJECT
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Water Balance

Table 4.14-2 summarizes the projected demand and supply forecast by the 2005 Urban Water Management Plan between 2005 and 2030. Water demand projections were obtained from a 2000 Demand Study prepared by East Bay MUD that evaluated the buildout potential of local land use plans within its service area in a demand study that assumed land uses changes and densification of uses over time. The supply analysis modeled four scenarios: normal water year, single dry year, multiple dry years (2 years), and multiple dry years (3 years). Note that East Bay MUD delivered 205 mgd in 2005 and 211 mgd in 2006, which were substantially below the demand projections contained in the 2005 Urban Water Management Plan.

Table 4.14-2: Demand and Supply Projections (2025–2030)

Scenario	Category	Year (million gallons per day)					
		2005	2010	2015	2020	2025	2030
Demand	Unadjusted Customer Demand	241	258	267	277	279	281
	Adjusted For Conservation	-13	-21	-27	-35	-35	-35
	Adjusted For Recycled Water	-16	-12	-14	-14	-14	-14
	Planning Level of Demand	222	225	226	228	230	232
Normal Water Year	Available Supply	>222	>225	>226	>228	>230	>232
Single Dry Year (Year 1)	Available Supply	211	213	215	217	219	220
	Deficiency (5 percent maximum)*	5%	5%	5%	5%	5%	5%
	Supplementary Supply Needed	69	0	0	0	0	0
Multiple Dry Years (Year 2)	Available Supply	167	168	170	171	173	174
	Deficiency (25 percent maximum)*	25%	25%	25%	25%	25%	25%
	Supplementary Supply Needed	40	0	0	0	0	0
Multiple Dry Years (Year 3)	Available Supply	43	167	166	153	151	147
	Deficiency (25 percent maximum)*	56%**	26%	27%	33%	34%	37%
	Supplementary Supply Needed	15	1	4	18	22	27
Three Year Drought	Supplementary Supply Needed to Limit Deficiency to 25 percent	124	1	4	18	22	27
Notes: * Deficiency signifies maximum rationing level. ** The Freeport Regional Water Project is projected to provide dry-year water supplies beginning in 2010. Source: East Bay Municipal Utility District, 2005.							

As shown in the above table, the three-year drought scenario would result in projected demand outpacing available supplies. Under the single-dry year scenario, a 5-percent reduction in demand could be achieved through rationing, and under the multiple dry year scenarios, a 25-percent reduction in necessary supply could be achieved through rationing. The rationing would be sufficient to provide for adequate water balance for the single dry year and multiple dry year (2 years)

scenarios, but a deficit would occur for the multiple dry year (3 years) scenario. However, the deficit under the 3-year drought scenario would only be slightly above the reduction in supply that could be accomplished through 25-percent reduction, particularly during the early portion of the planning period.

Water Supply Projects

East Bay MUD has several projects underway to enhance its water supply. Below is a summary of each of them.

Freeport Regional Water Project

The \$850 million Freeport Regional Water Project will provide up to 100 million mgd for East Bay MUD customers and 85 mgd for future needs in Sacramento County. East Bay MUD is partnering with the Sacramento County Water Agency to build this regional water project near Freeport on the Sacramento River. The Freeport Project will be available to supplement water supply only during dry years and limit potential rationing for East Bay MUD customers to 25 percent and reduce economic losses during droughts. The project includes a 185-mgd intake and pump station on the Sacramento River and 17 miles of large-diameter pipe extending to the Folsom South Canal. East Bay MUD's share will flow south down the canal to a 100-mgd pumping plant, then through 19 more miles of pipe to a second pumping plant near Camanche Reservoir and into the Mokelumne Aqueducts. A legal settlement was reached with project opponents in early 2007 and construction began in May 2007. The project is scheduled for completion in 2009. This project was evaluated in an Environmental Impact Report/Environmental Impact Statement (State Clearinghouse No. 2002032132) certified by the Freeport Regional Water Authority Board of Directors in January 2005.

Desalination

East Bay MUD is a participating agency in the Bay Area Regional Desalination Project, which is exploring the feasibility of using desalination technology as a long-term water supply option. Initiated in 2003, the \$226 million Bay Area Regional Desalination Project is envisioned to serve 5.4 million customers within the service areas of East Bay MUD, the Contra Costa Water District (CCWD), the San Francisco Public Utilities Commission, and the Santa Clara Valley Water District with 65 mgd of water by 2012. Currently, three sites are undergoing feasibility analysis for suitability of supporting a desalination plant: the Mirant Power Plant in Pittsburg, the East Bay MUD's wastewater treatment plant in Oakland, and the Oceanside Wastewater Treatment Plant in San Francisco. A pilot test in Mallard Slough in east Contra Costa County is scheduled to commence this year. This project component will include both state and federal environmental review.

East Bay MUD has also pursued an independent desalination project for the C&H sugar plant in Crockett that would provide approximately 1.5 mgd of water that would replace current potable supplies. The project is intended to be a low-energy application of desalination by capturing unused steam energy at plant for use as energy.

Improved Linkages

East Bay MUD is in the process of improving its linkages with neighboring water agencies to provide redundancy and enhance reliability during emergencies or planned maintenance.

East Bay MUD, the San Francisco Public Utilities Commission, and the City of Hayward are building an intertie (interconnection) in Hayward to transfer up to 30 mgd among the agencies. The California Department of Water Resources awarded a \$2.6 million grant for the construction, begun in January 2005 and expected to be in service in 2007. This project was evaluated in a Negative Declaration (State Clearinghouse No. 2003022126) certified by the Hayward City Council in April 2003.

CCWD began construction of another intertie in Brentwood, where East Bay MUD's Mokelumne Aqueduct and CCWD's Los Vaqueros Pipeline cross. This link will provide water to CCWD after East Bay MUD completes the Freeport Regional Water Project on the Sacramento River in 2009, and will supply up to 100 mgd of untreated water to either East Bay MUD or CCWD in an emergency. This project was evaluated in a Negative Declaration (State Clearinghouse No. 2005082108) certified by CCWD's Board of Directors in 2005.

Aquifer Storage

East Bay MUD is also seeking to expand its water supply options through aquifer storage of surplus water. East Bay MUD is currently in the process of developing the Bayside Groundwater Project in San Leandro and San Lorenzo, which will store surplus water available in wet years in an underground aquifer for use in dry years. The project is expected to supply 1 mgd and is scheduled to be completed in 2008. This project was evaluated in an Environmental Impact Report (State Clearinghouse No. 2000092044) certified by the East Bay MUD Board of Directors in November 2005.

Drought Management Plan

East Bay MUD has a Drought Management Program to address potential water shortages caused by droughts and other water supply disruptions. East Bay MUD determines its water supply each April and initiates water demand reduction programs if projected supplies are less than 500,000 acre-feet. Drought Management Program measures include voluntary and mandatory reduction strategies listed below. These strategies become mandatory if East Bay MUD declares a water shortage emergency.

Moderate – 0- to 15-Percent Shortage

- Initiate public information campaign.
- Institute voluntary or mandatory water use goals and restrictions.
- Institute rate changes to elicit conservation (i.e., inclining block rate structures).
- Increase advertising of water-saving devices provided free to customers and other free conservation programs.

- Increase efficiency of system water supplies (e.g., intensify enforcement of hydrant opening regulations, increase meter-reading efficiency and maintenance, intensify leak detection and repair program).
- Prepare and disseminate brochures, bill inserts, and other literature addressing the drought situation and conservation strategies.
- Intensify media outreach program and advertising efforts to remind customers to save water.

Severe – 15- to 25-Percent Shortage

- Intensify actions taken during moderate stage
- Institute mandatory water use reductions
- Declare a water shortage emergency
- Seek and procure a supplemental water supply
- Implement rate and water use restriction changes appropriate to shortage

Critical - 25 percent or more

- Intensify all actions taken during severe stage

As shown in Table 4.14-2, East Bay MUD's long-term water planning assumes that a 5-percent reduction in water demand would be made during the first year of a three-year drought and a 25-percent reduction could be made in the second and third years of the drought.

Wastewater

Central Contra Costa Sanitary District (Central San) provides wastewater collection and treatment to the northern portion of the City of San Ramon, the incorporated cities and towns of Danville, Orinda, Lafayette, Moraga, Walnut Creek, Pleasant Hill, and Martinez, and the unincorporated communities of Alamo, Blackhawk, and Pacheco. Central San provides treatment for the cities of Concord and Clayton. The total population within the Central San service area is approximately 445,000. Central San is an independent public utility agency governed by an elected five-member board of directors.

Collection System

Central San's sewer collection infrastructure consists of approximately 1,500 miles of underground pipe ranging from 4 to 102 inches in diameter and 23 lift stations. Wastewater flows from San Ramon are conveyed north to Central San's wastewater treatment plant via the San Ramon Interceptor located within the Iron Horse Trail corridor. In 2003, Central San initiated a capacity improvement project for the interceptor between Norris Canyon Road in San Ramon and St. James Place in Danville in anticipation of increased wastewater flows from planned growth in San Ramon. Central San is scheduled to finish the interceptor capacity improvement project in mid-2008.

Treatment Plant

Central San treats sewage at its treatment plant in Martinez. The treatment plant has a dry weather effluent discharge limit of 53.8 mgd. In 2006, the average daily dry weather flow at treatment plant was 39.1 mgd. The treatment plant uses ultraviolet disinfection and has secondary treatment capabilities. A portion of the treated effluent receives additional treatment and is used as recycled water; the remaining effluent is released into Suisun Bay via an outfall. The treatment plant is in compliance with all applicable federal and state environmental health and safety standards for treated wastewater. The plant obtains 90 percent of its electricity through a methane cogeneration system with a nearby landfill.

Storm Drainage

The City of San Ramon owns and maintains drainage facilities within the City limits. The four parcels constituting the project site and the immediate vicinity are drained by an existing 72-inch-diameter storm drain located under Camino Ramon that transitions to an 84-inch-diameter pipe south of Bollinger Canyon Road and, ultimately, to a 96-inch-diameter pipeline located under the Bishop Ranch 1 surface parking areas. The 96-inch-diameter pipeline crosses Bishop Ranch 1 to the Iron Horse Trail corridor and ultimately discharges into South San Ramon Creek, approximately 2,000 feet south of Parcel 1A.

Solid Waste

Solid waste collection and disposal in San Ramon is provided by Valley Waste Management, which is part of Waste Management Inc. Valley Waste Management provides solid waste collection services under an exclusive franchise agreement with the City of San Ramon. These services include collection of solid waste from commercial, industrial, and residential customers, collection of residential recyclables and yard trimmings, and management of the San Ramon Recycling Center.

Landfills

The California Integrated Waste Management Board indicates that 52,110 tons of solid waste was generated in the City of San Ramon in 2005. More than 80 percent of San Ramon’s solid waste was disposed at the Vasco Road Sanitary Landfill, with smaller amounts disposed of at other regional landfills. Table 4.14-3 provides a summary of the regional landfills that accept solid waste from San Ramon.

Table 4.14-3: Landfill Summary

Landfill	Location	Maximum Daily Throughput (tons)	Remaining Capacity (cubic yards)	Closure Date
Altamont Landfill	Livermore	11,150	124.4 million	2025
Keller Canyon Landfill	Pittsburg	3,500	68.2 million	2030
Newby Island Sanitary Landfill	San Jose	4,000	18.2 million	2025

Table 4.14-3 (Cont.): Landfill Summary

Landfill	Location	Maximum Daily Throughput (tons)	Remaining Capacity (cubic yards)	Closure Date
Potrero Hills Sanitary Landfill	Suisun City	4,330	8.2 million	2011
Vasco Road Landfill	Livermore	2,518	12.2 million	2015
Source: California Integrated Waste Management Board, 2007.				

Waste Diversion

The California Integrated Waste Management Board indicates that the City of San Ramon had a waste diversion rate of 51 percent in 2004, the most recent year final numbers are available. Table 4.14-4 provides a summary of San Ramon's waste diversion rates between 2003 and 2005.

Table 4.14-4: Waste Diversion Rates (2003–2005)

2003	2004	2005
54	51	52*
Notes: * Preliminary rate submitted by City; subject to change Source: California Integrated Waste Management Board, 2007.		

Recycling and Green Waste Collection

Valley Waste Management provides curbside recycling and green waste pick-up services to residential customers in San Ramon. Accepted recyclable materials include aluminum, glass, plastic, cardboard, mixed paper, newsprint, and motor oil. Commercial customers can contract with one or more of the 10 City-licensed recycling service providers. The providers are Amador Valley Industries; Green Waste Recovery, Inc.; Mt. Diablo Recycling; Pacific Rim Recycling; Pagnini's, Inc.; Premier Recycle; Recycle for Hope; Super Link Plastic, Inc.; Valley Waste Management; and Weyerhaeuser Company.

As part of its contract with the City, Valley Waste Management operates the San Ramon Recycling Center at 2231 Omega Road in the northern portion of the City. The San Ramon Recycling Center is a drop-off facility that accepts the previously mentioned recyclable materials, as well as scrap metal and wooden pallets. The Recycling Center also hosts a GoodWill trailer that accepts clothing and other household items for reuse.

Household Hazardous Waste

Central San accepts household hazardous waste (paint, pesticides, motor oil, and other household chemicals) from San Ramon residents and businesses that qualify as small quantity generators at its Household Hazardous Waste Collection Facility, located at 4797 Imhoff Place in Martinez. Valley Waste Management collected used motor oil and motor oil filters from single-family homes as a part of the weekly curbside recyclables collection. Electronic scrap and passenger car/truck tires are

collected by Valley Waste Management as a part of the three scheduled bulky waste collections that each single family home received each year.

Energy

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to the City of San Ramon. Below is a discussion of each energy source.

Electricity

PG&E provides electricity to all or part of 47 counties in California, constituting most of the northern and central portions of the State. PG&E obtains 40 percent of electricity from its own generation sources and the remaining 60 percent from outside sources. PG&E-owned generating capacity includes nuclear, fossil fuel-fired, and hydroelectric facilities. Outside suppliers to PG&E include the State Department of Water Resources, irrigation districts, renewable energy suppliers, and other fossil fuel-fired suppliers. PG&E operates approximately 158,700 circuit miles of transmission and distribution lines. PG&E is interconnected with electric power systems in the Western Electricity Coordinating Council, which includes 14 western states; Alberta and British Columbia, Canada; and parts of Mexico.

In 2006, PG&E delivered 84,310 gigawatt hours of electricity to its customers. Commercial customers accounted for largest segment of demand, with 40 percent of the total.

Natural Gas

PG&E provides natural gas to all or part of 38 counties in California, comprising most of the northern and central portions of the state. PG&E obtains approximately 62 percent of its natural gas supplies from western Canada, 32 percent from the southwestern United States, and the balance from in-state sources. PG&E operates approximately 47,000 miles of transmission and distribution pipelines.

In 2006, PG&E delivered 836 billion cubic feet (Bcf) of natural gas to its customers. Commercial customers accounted for the smallest segment of demand, with 12 percent of the total.

4.14.3 - Regulatory Framework

State

California Water Code Sections 10910-10915

California Water Code Sections 10910 through 10915 require that a Water Supply Assessment be prepared for any project with the following characteristics:

- A residential development of more than 500 dwelling units.
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

- A proposed hotel or motel, or both, having more than 500 rooms.
- An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use project that includes one or more of the projects specified above.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Water Supply Assessment must evaluate the proposed project's demand and determine if the local water supplier has adequate supplies to serve the project.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §§ 10610-10656) requires that all urban water suppliers prepare urban water management plans and update them every 5 years.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed Assembly Bill 939, the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent in 1995 and 50 percent in 2000; established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers safe, reliable utility service at reasonable rates, protect utility customers from fraud, and promote a healthy California economy.

California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The standards were updated in 2005 and set a goal of reducing growth in electricity use by 478 gigawatt-hours per year (GWh/y) and growth in natural gas use by 8.8 million therms per year (therms/y). The savings attributable to new nonresidential buildings are 163.2 GWh/y of electricity savings and 0.5 million therms. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), indoor and outdoor lighting, and illuminated signs.

Local

City of San Ramon General Plan

The City of San Ramon General Plan establishes the following relevant policies related to utility systems:

- **Policy 2.4-I-16:** Evaluate the ability of new development to pay for its infrastructure, its share of public and community facilities, and the incremental operating costs it imposes.
- **Policy 2.4-I-17:** Existing City development review practices assure that new development provides for the capital facilities needed to serve it. Ongoing maintenance of those facilities – generally via infrastructure landscaping and lighting districts – is also typically provided for. While the defraying of such costs by new development would normally be expected, some projects may contribute to the community in ways that compensate for a negative fiscal impact.
- **Policy 3.1-I-7:** Allow urban development only within the City’s Urban Growth Boundary and only in accord with a plan for full urban services (police, fire, parks, water, sewer, streets and storm drainage) to which all providers are committed.
- **Policy 3.2-G-1:** Ensure the attainment of public facility and service standards through the City’s development review process, Capital Improvement Program, and a variety of funding mechanisms to maintain existing facilities and help fund expansion.
- **Policy 3.2-I-3:** Require new development to fund public facilities and infrastructure that is deemed necessary to mitigate the impact of that new development.
- **Policy 3.2-I-4:** Levy mitigation fees for public facilities and infrastructure improvements in proportion to a new development’s impact.
- **Policy 7.4-I-1:** Cooperate with Pacific Gas and Electric Company (PG&E) to monitor future utility expansion to ensure that facilities are designed and planned with minimal impact on existing and future residents.
- **Policy 7.4-I-3:** Require new development to underground all utility lines needed to serve the future buildings and their occupants, and work with PG&E to underground utilities in existing residential neighborhoods, making the Southern San Ramon area a priority.
- **Policy 7.4-I-7:** Encourage all new development to provide the technology to support multiple telecommunications facilities and providers.
- **Policy 7.5-G-1:** Manage solid waste so that State diversion goals are exceeded and the best possible service is provided to the citizens and businesses of San Ramon.
- **Policy 7.5-I-2:** Provide and promote opportunities to reduce waste at home and in businesses, and make possible the safe disposal of hazardous materials.

- **Policy 7.5-I-4:** Require builders to incorporate interior and exterior storage areas for recyclables into new commercial and residential remodeled buildings, and encourage remodeled buildings (both residential and commercial) to make recycling activities more convenient for those who use the buildings.
- **Policy 8.7-G-1:** Encourage the implementation of water quality and conservation programs and measures by San Ramon employers, residents, and service providers.
- **Policy 8.7-I-2:** Require new development to be equipped with water conservation devices, including the possibility of dual water systems.
- **Policy 8.7-I-3:** Continue to implement and enforce provisions of the Water Conservation and Landscape Ordinance 218.
- **Policy 8.7-I-4:** Support the application of reclaimed water to reduce the demand on municipal water supplies.
- **Policy 8.7-I-5:** Work with DERWA (Dublin San Ramon Services District and East Bay Municipal Utility District Recycled Water Authorities) to encourage and promote water reclamation projects in the City of San Ramon.
- **Policy 9.3-I-2:** Require new development to prepare hydrologic studies to assess storm runoff impacts on the local and subregional storm drainage systems and/or creek corridors.
- **Policy 9.3-I-3:** Require new development to provide for the perpetual funding and ongoing maintenance of detention basins. Maintenance may be by the City under contract, by a private entity, or by another public agency.
- **Policy 9.3-I-4:** Establish landscape and maintenance guidelines for required detention basins to ensure that such facilities achieve a look and quality that is consistent with the landscape of San Ramon and applicable regulatory requirements.
- **Policy 11.14-G-1:** Promote energy conserving practices in the construction, renovation, and maintenance of San Ramon's housing units.
- **Policy 11.14-I-2:** Enforce the State's energy conservation standards for new residential construction and renovations to existing structures.

San Ramon City Code

San Ramon City Code Division C4 Chapter VIII (Ordinance No. 218) requires that water conservation features be incorporated into landscaping plans. The ordinance includes provisions requiring the use of drought tolerant landscaping, climate sensitive irrigation systems, use of water efficient sprinkler heads, and other water conservation practices and technologies where feasible.

East Bay Municipal Utility District

East Bay MUD Policy 8.01 requires that customers use recycled water for non-domestic purpose when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health, and not injurious to plants or wildlife.

4.14.4 - Methodology

East Bay MUD prepared a Water Supply Assessment for the proposed project in April 2007. The Water Supply Assessment was required by State law because the proposed project would develop a mixed-use project that would demand an equivalent or greater amount of water as a 500 unit residential project. Note that the proposed project would also exceed the thresholds related to 500,000 square feet of retail space and 250,000 square feet of office space. The Water Supply Assessment provided demand projections for the proposed project and evaluated those projections in relation to those contained in East Bay MUD's 2005 Urban Water Management Plan. The Water Supply Assessment is contained in its entirety in Appendix K of this DSEIR.

Central San prepared a Development Capacity Analysis for the proposed project that evaluated demand and available wastewater system capacity. The Development Capacity Analysis is contained in its entirety in Appendix H of this DSEIR.

RBF Consulting, the project engineer, prepared project utility plans for water, wastewater, and drainage. RBF consulted with utility providers including East Bay MUD, DERWA, Central San, and the City of San Ramon about existing infrastructure and necessary improvements to serve the proposed project. RBF also prepared a stand-alone Preliminary Hydrology Report, which is contained in its entirety in Appendix F of this DSEIR.

Michael Brandman Associates (MBA) evaluated utility system impacts using the aforementioned reports and plans, as well as utility information provided in the City of San Ramon General Plan, the City of San Ramon General Plan EIR, the East Bay MUD 2006 Annual Report, and the PG&E 10-k Annual Report. MBA also reviewed information posted on agency websites, including East Bay MUD, Central San, DERWA, and the California Integrated Waste Management Board.

4.14.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to utilities and service systems are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b.) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

- c.) 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?
- d.) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e.) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- f.) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- g.) Comply with federal, state, and local statutes and regulations related to solid waste?
- h.) Result in the unnecessary or wasteful use of energy?

4.14.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Potable Water

Impact US-1: The proposed project would substantially increase demand for potable water.

Impact Analysis

The proposed project would develop and redevelop a total of approximately 2.1 million square feet of mixed uses (approximately 1.6 million net square feet above existing vested entitlement and approximately 1.9 million square feet of net additional construction above existing site conditions) on approximately 44 acres and would increase potable water demand from existing levels. Pursuant to State law, East Bay MUD prepared a Water Supply Assessment in April 2007. The findings of the Water Supply Assessment are summarized below and the complete document is available in Appendix K of this DSEIR.

The Water Supply Assessment indicates that existing potable water demand on the four parcels that constitute the project site is 22,000 gallons per day and projects that the completed City Center project's demand would be 400,000 gallons per day. The Water Supply Assessment states that the 378,000-gallons-per-day net increase is consistent with the demand projections contained in East Bay MUD's 2005 Urban Water Management Plan for its service area and would not change the 2030 horizon year demand projections. The demand projections were previously provided in Table 4.14-2.

As previously discussed, East Bay MUD's 2005 Urban Water Management Plan forecasts a worst-case scenario of a three-year drought that would result in a net deficit of 1 mgd at the end of the third year in 2009 and 27 mgd at the end of the third year in 2030. The three-year drought scenario assumes that rationing would reduce total demand by 5 percent during the first year and by 25 percent

in the second and third years. The Freeport Regional Water Project, scheduled to come on line in 2010, would provide 100 mgd of supplemental supply during dry years.

It is important to note that the 2005 Urban Water Management Plan's planning level of demand is higher than actual observed demand. The 2005 Urban Water Management Plan assumed that there would be 222 mgd of demand in 2005. Usage figures provided by East Bay MUD indicate that actual usage was 205 mgd in 2005, which is 7 percent lower than forecast in the 2005 Urban Water Management Plan. Therefore, the demand projections contained in the 2005 Urban Water Management Plan should be treated as conservative and will likely be significantly higher than actual observed demand over the planning horizon of the plan.

In addition to the Freeport Regional Water Project, East Bay MUD is also developing other sources of supplemental supplies. These projects include participating in the Bay Area Regional Desalination Project and developing the Bayside Groundwater Project. The 2005 Urban Water Management Plan did not account for these supplies in its long-term projections. Therefore, when these projects are developed, they would add additional supplies beyond what was projected in Table 4.14-2.

The 2005 Urban Water Management Plan indicates that outdoor water use ranges from 14 to 38 percent of total water use depending on residential housing type. The proposed project would connect to the DERWA recycled water system for outdoor irrigation. Because no detailed plans of the proposed project's recycled water system are available at the time of this writing, this has been incorporated as a mitigation measure.

The proposed project would also be required to comply with the Model Water Efficient Landscape Ordinance, which requires that plans and water usage estimates for landscape irrigation be submitted prior to the issuance of ministerial permits. This has been incorporated as a mitigation measure.

Finally, the proposed project would implement various water conservation measures and practices, including high efficient washers, re-circulating hot water systems, tankless hot water heaters, green roofs, evapotranspiration-based water controllers, water budgets for landscape irrigation, and high efficiency toilets. These have been incorporated as a mitigation measure.

In summary, the proposed project would cause a net increase in potable water demand by 378,000 gallons per day in relation to existing demand on the project site. East Bay MUD indicated that this demand is accounted for in their long-term water supply planning and would not require the development of additional supplies. While East Bay MUD 2005 Urban Water Management Plan forecasts a worst-case scenario of a three-year drought that would result in a net deficit of 1 mgd at the end of the third year in 2010 and 27 mgd at the end of the third year in 2030, the proposed project would not exacerbate this projected deficit because its demand is accounted for in this total. Moreover, East Bay MUD has several likely sources of supplemental water supply under development that would reduce this deficit. Mitigation is proposed that would reduce the project's

potable water demand through the use of recycled water irrigation, compliance with the Model Water Efficient Landscape Ordinance, and the implementation of water conservation measures. For these reasons, the proposed project would have a less than significant impact on potable water.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

- MM US-1a** To the maximum extent practicable, all outdoor landscaped areas associated with the Plaza District, Bishop Ranch 1A, and City Hall shall be irrigated with recycled water from the DERWA system.
- MM US-1b** All project landscaping shall comply with the Model Water Efficient Landscape Ordinance (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495), which requires that a landscape documentation package be submitted to the lead agency prior to the issuance of ministerial permits. The package shall include the following: a water conservation concept statement, calculations of water allowance and usage, a landscape design plan, an irrigation design plan, irrigation schedules, a maintenance schedule, a landscape irrigation audit schedule, a grading design plan, and soil analysis.
- MM US-1c** The project applicant shall implement the following water conservation measures into their respective components of the proposed project:
- High-efficiency clothes washers and dishwashing machines.
 - Re-circulating hot water systems.
 - High-efficiency or tankless hot water heaters.
 - Green roofs.
 - Evapotranspiration-based irrigation controllers.
 - Water budgets for landscape irrigation.
 - High efficiency toilets in non-residential buildings.

Level of Significance After Mitigation

Less than significant impact.

Wastewater

Impact US-2: The proposed project would not result in a need for new or expanded offsite conveyance or treatment facilities.

Impact Analysis

Central San prepared a Development Capacity Analysis for the proposed project that projected the project would generate a net increase of 181,935 gallons of wastewater per day. This estimate accounts for existing wastewater generated by Bishop Ranch 2. The Development Capacity Analysis

indicates that the proposed project would connect to existing sewer lines located under Bishop Drive, Camino Ramon, Bollinger Canyon Road, and the Bishop Ranch 1 East road. Wastewater would be conveyed in these sewer lines to a lift station located in the Iron Horse Trail corridor near the southern boundary of Bishop Ranch 1. From there, project effluent would enter the San Ramon Interceptor and be conveyed north up the Iron Horse Trail corridor to the treatment plant in Martinez. The Development Capacity Analysis indicates that there is adequate capacity in the interceptor and at the treatment plant to accommodate the proposed project's effluent under a worst-case scenario of a 20-year storm event. Therefore, the proposed project would not result in a need for new or expanded offsite conveyance or treatment facilities.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Storm Drainage

Impact US-3: **The proposed project would not result in a need for new or expanded offsite storm drainage facilities.**

Impact Analysis

The development of the proposed project would require the removal of all existing storm drain infrastructure located on Parcels 1A and 1B, and in Bishop Ranch 2. The proposed project would maintain the existing storm drain line under Camino Ramon and the Bishop Ranch 1 entrance road to a point approximately 200 feet south of Bollinger Canyon Road. From there, the existing 96-inch-diameter pipe would be removed because it veers east and crosses the footprint of the Bishop Ranch 1A parking structure. A replacement storm drain would be installed around the south side of the parking structure and would reconnect with the remainder of the existing 96-inch-diameter storm drain that discharges into South San Ramon Creek. This alignment modification would not significantly affect the hydrologic or hydraulic conditions on the project site or locations upstream or downstream of the project site.

The proposed project would also implement green roofs and bioswales that would capture runoff from impervious surfaces. Green roofs are vegetated areas on rooftops fed by piping from stormwater collection systems. Bioswales are vegetated drainage features that promote percolation of storm water runoff. Both features are intended to capture urban water pollutants and reduce the volume of runoff leaving the project site. Through the implementation of these onsite features, there would be no need for offsite water treatment or flood control improvements in downstream

waterways. In addition, mitigation measures HYD-2A and HYD-2B require the project applicant to submit detailed plans demonstrating the effectiveness of these measures.

The proposed project would have a less than significant impact on storm drainage.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Solid Waste

Impact US-4: The proposed project would generate substantial amounts of solid waste that may result in the unnecessary use of regional landfill capacity.

Impact Analysis

Solid waste would be generated by short-term construction activities and long-term operational activities. Each is discussed below.

Construction Waste Generation

The construction phase of the proposed project would include demolition of Bishop Ranch 2 and the Bishop Ranch parking areas on Parcels 1A and 1B and the construction of more than 2.1 million square feet of residential and nonresidential uses. Using construction and demolition debris waste generation rates published by the U.S. Environmental Protection Agency, an estimate of the total construction and demolition debris generated by the proposed project is provided in Table 4.14-5. Note that nonresidential and residential construction activities were calculated separately because of differences in waste generation rates.

Table 4.14-5: Construction and Demolition Waste Generation

Activity	Type	Waste Generation Rate	Square Footage	Total
Demolition	Nonresidential	155 pounds/square foot	194,652	15,086 tons
Construction	Nonresidential	3.89 pounds/square foot	1,617,797	3,147 tons
	Residential	4.38 pounds/square foot	550,669	1,206 tons
Total				19,439 tons

1 ton = 2,000 pounds
Source: U.S. Environmental Protection Agency, 1998.

The proposed project is estimated to generate 19,439 tons of construction and demolition debris. This tonnage would be spread out over the length of construction activities and the actual volumes of construction waste disposed of at any one time are not expected to be more than several tons of

debris. However, because 19,439 tons represents a significant amount of construction and demolition waste, mitigation is proposed that would require the applicant to implement construction and demolition recycling to the maximum extent feasible. The implementation of this mitigation measure would reduce short-term solid waste generation substantially. Therefore, short-term construction impacts on landfill capacity would be less than significant.

Operational Waste Generation

Daily and annual operational solid waste generation estimates are provided in Table 4.14-6. The waste generation rates provided in the table were derived from information provided in the City of San Ramon General Plan EIR. This table accounts for existing solid waste generated by Bishop Ranch 2. Note that the estimates in the table are considered conservative estimates and likely overstate actual operational solid waste generation.

Table 4.14-6: Operational Net Solid Waste Generation

Use	Size	Waste Generation Rate	Daily Total (tons)	Annual Total (tons)
Bishop Ranch 2 (existing)	194,652 square feet	0.1 pound/square foot/day	(10)	(3,650)
Residential and Hotel	656 units	13.7 pounds/unit/day	4.5	1,640
Non-Residential (includes retail, office, and civic)	1,477,930 square feet	0.1 pound/square foot/day	74	26,973
Net Total			68.5	24,963
Notes: 1 ton = 2,000 pounds Waste generation rates were obtained from Table 4.6-3 of the City of San Ramon General Plan EIR. Source: City of San Ramon, 2001.				

The proposed project is estimated to generate a net total of 68.5 tons of solid waste on a daily basis and 24,963 tons on an annual basis. While regional landfill capacity would be available to accommodate this amount of solid waste, this figure could be substantially reduced through recycling and waste reduction practices and would avoid the unnecessary use of landfill capacity. Mitigation is proposed that would require the applicant to implement operational recycling and waste reduction practices to the maximum extent feasible. The implementation of this mitigation measure would reduce operational solid waste generation substantially and conserve landfill capacity. Therefore, long-term operational impacts on landfill capacity would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM US-4a Prior to the issuance of demolition permits, the project applicant shall submit a recycling plan to the City of San Ramon identifying the procedures by which

construction and demolition would be salvaged and recycled to the maximum extent feasible. The plan shall include proof that a construction and demolition debris recycler is under contract to the applicant to perform this work.

MM US-4b Prior to the issuance of occupancy permits, the project applicant shall submit a Recycling and Waste Reduction Plan to the City of San Ramon identifying practices it and its tenants would implement during project operations that demonstrate at least 50-percent diversion.

Operation recycling and waste reduction practices shall include, but not be limited to:

- Contracting with one or more City-licensed commercial recycling providers to serve all project commercial uses. Recyclable materials collection containers shall be provided in common commercial tenant disposal areas and be equipped to accept aluminum, cardboard, glass, green waste, mixed paper, and plastic materials, and, where feasible, food scraps.
- Compliance with City of San Ramon's 50-percent waste diversion ordinance.
- Installation of common recycling facilities in all residential uses. These facilities shall be equipped to accept aluminum, cardboard, glass, mixed paper, and plastic materials and contain signage clearly identifying accepted materials.
- Periodic notification of residents and commercial tenants about the location of recycling facilities and accepted materials.
- Installation of recyclable materials receptacles in public places (e.g., along streets in the Plaza District, outside of City Hall, etc.). Recycling receptacles shall be of high-quality design and contain signage clearly identifying accepted materials.
- Common commercial and residential disposal areas shall be designed with sufficient space to accommodate separate containers for solid waste, recyclables, organics, and—for restaurants—tallow, subject to approval of the franchise waste provider and City of San Ramon. Plans should include adequate and safe access for solid waste and recycling vehicles to access and collect materials.

Level of Significance After Mitigation

Less than significant impact.

Energy

Impact US-5: The proposed project would demand substantial amounts of electricity and natural gas.

Impact Analysis

Using consumption figures provided by the California Energy Commission, the proposed project’s estimated building electricity and natural gas consumption following construction is summarized in Table 4.14-7. As shown in the table, the proposed project is estimated to demand a net total of 84,900 kilowatt hours (kWH) and 6,490 thousand British Thermal Units (kBTUs) on a daily basis.

Table 4.14-7: Estimated Energy Consumption

Use	Energy Source	Annual Consumption Rate	Estimated Daily Consumption	Estimated Annual Consumption
Bishop Ranch 2	Electricity	15.7 kWH/square foot (Electricity) 1.2 kBTU/square foot (Natural Gas)	(8,373 kWH)	(3 million kWH)
	Natural Gas		(640 kBTU)	(233,000 kBTU)
City Center Project	Electricity		93,273 kWH	34 million kWH
	Natural Gas		7,130 kBTU	2.6 million kBTU
Net Change	Electricity		84,900 kWH	31 million kWH
	Natural Gas		6,490 kBTU	2.3 million kBTU
kWH = kilowatt hours kBTU = 1,000 British Thermal Units Source: California Energy Commission, 2007.				

PG&E provided a letter dated May 17, 2007 indicating that it has adequate existing infrastructure and electricity and natural gas supplies to serve the proposed project (available in Appendix H of this DSEIR).

Nonetheless, the proposed project’s projected consumption of electricity and natural gas can be reduced through energy conservation measures such as natural day lighting, automated occupancy sensors, participation in PG&E energy efficiency rebate programs, high-efficiency clothes washers and dishwashing machines, re-circulating hot water systems, and tankless water heaters. These measures have been incorporated as mitigation. With the implementation of these energy conservation measures, the proposed project’s energy demand would not be unnecessary or wasteful. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM US-5 The project applicant shall implement the following energy conservation measures into the proposed project, unless safety or technical feasibility considerations take precedence:

- Natural day lighting through the use of windows and skylights.
- Automated occupancy sensors in structures that automatically shut off lights when rooms are unoccupied.
- Participation in PG&E energy efficiency rebate programs (e.g., air conditioning, gas heating, refrigeration, and lighting).
- High-efficiency clothes washers and dishwashing machines.
- Re-circulating hot water systems.
- Tankless water heaters.

Level of Significance After Mitigation

Less than significant impact.

SECTION 5: ALTERNATIVES TO THE PROPOSED PROJECT

5.1 - Introduction

In accordance with CEQA Guidelines Section 15126.6, this Draft Subsequent Environmental Impact Report (DSEIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision makers and the general public with a reasonable degree of feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines Section 15126.6):

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects

Significant Unavoidable Impacts

This EIR has identified six significant unavoidable impacts of the proposed project: (1) project air emissions, (2) cumulative air emissions, (3) inconsistency with the Clean Air Plan, (4) greenhouse gas emissions, (5) growth inducement, and (6) freeway operations.

Previously Considered Alternatives

The previously certified City of San Ramon General Plan EIR and the City Civic Center EIRs evaluated the following alternatives:

City of San Ramon General Plan EIR

- **No Project:** The City of San Ramon 2020 General Plan would not be adopted, and the 1995 General Plan would remain in effect.
- **Infill/Maximum Open Space Preservation:** The 2020 General Plan would be amended to re-designate acreage in existing developed areas for more intense development, including mixed-use projects, and limiting development on undeveloped or rural parcels on the urban fringe.
- **Existing Density/Limited Hillside Growth:** The 2020 General Plan would be amended to allow for limited intensification of uses in Bishop Ranch and the San Ramon Valley Boulevard and Alcosta Boulevard corridors, and limiting hillside development. This was identified as the Environmentally Superior Alternative.

City Civic Center EIR

- **No Project Alternative:** The City Civic Center project would not be developed, and the project site would remain in its existing condition.
- **Reduced Density Alternative:** The Council Chamber, City offices, a children's museum, a center for visual arts, and an aquatic center would be developed; the library and retail components would be eliminated.

Alternatives to the Proposed Project

The four alternatives to the proposed project analyzed in this section are as follows:

- **No Project Alternative:** The project site would remain in its existing condition, and the proposed project would not be developed, except for Parcel 1A, which would be developed as a 328,220-square-foot office complex under an existing vested entitlement.
- **Reduced Density Option 1 Alternative:** The Plaza District would be eliminated from the project, and Bishop Ranch 1A, the City Hall, and Transit Center would be developed.
- **Reduced Density Option 2 Alternative:** Bishop Ranch 1A, the City Hall, and the Transit Center would be eliminated from the project, and the Plaza District would be developed. Parcel 1A would be developed as a 328,220-square-foot office complex under an existing vested entitlement.
- **City Civic Center Alternative:** The previously proposed City Civic Center Project would be developed on Parcels 1A and 3A.

As stated in Section 3.0, Project Description, the objectives of the proposed project are to:

- Strengthen San Ramon and Bishop Ranch with a vibrant mix of complementary uses, including retail, residential, office, hotel, and civic.
- Develop a new, vital neighborhood for living, working, shopping, dining, entertaining, learning, and gathering.
- Create new beautiful landscaped public spaces to accommodate community and cultural events.
- Replace the outdated and undersized current City offices and Council Chambers with a new municipal campus with modern, adequately sized facilities to serve the ever-increasing demands of planned growth in San Ramon.
- Enhance the public safety in San Ramon through the provision of a state-of-the-art Police Department headquarters.
- Improve the delivery and quality of library services to San Ramon residents through the provision of a larger, technologically advanced library.

- Increase mobility, reduce greenhouse gas emissions, and promote energy conservation in San Ramon, Bishop Ranch, and the proposed project through the inclusion of a Transit Center that would serve as a convenient, centralized location for public transit providers.
- Capitalize on the proposed project's adjacency to the Iron Horse Trail to promote the use of pedestrian and bicycle modes of transportation and encourage trip and greenhouse gas reduction and energy conservation.
- Encourage trip and greenhouse gas reduction and energy conservation throughout San Ramon, Bishop Ranch, and the proposed project through the siting of residential and office uses near shopping, dining, and entertainment.
- Establish public improvements, including landscaped sidewalks, plazas, and pedestrian connections, streets, parking structures, and a new "ring road" extending Bishop Drive to Bollinger Canyon Road.
- Add new experiences at Bishop Ranch and to the San Ramon community, including a five-star hotel, an art-screen cinema, new gourmet restaurants, and destination retail attractions.
- Include high-quality, high-density housing in a mixed-use setting to increase the diversity of housing opportunities in San Ramon and provide a type of housing option that is not currently available to local residents.
- Use high-quality architecture and landscaping consistent with the style of Bishop Ranch that will maintain and enhance the aesthetic character of the City of San Ramon.
- Maximize roadway safety through the provision of multiple vehicular ingress and egress opportunities to the proposed project internal roadways and parking facilities and improvements to the surrounding circulation system.
- Create increased new property and sales taxes annually, in perpetuity, for the City of San Ramon, and increased annual property taxes for Contra Costa County and various other local government agencies.
- Increase property values throughout San Ramon and San Ramon Valley.

Four alternatives to the proposed project are analyzed below, including a parcel-by-parcel analysis, where applicable. These analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both alternatives would result in a "Less than Significant Impact"). The actual degree of impact may be slightly different under each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

5.2 - Alternative 1 - No Project Alternative

Under the No Project Alternative, the proposed project would not be developed. Parcel 1A would be developed as a 328,220-square-foot office complex, as entitled under the existing City/Chevron Annexation and Development Agreement (since assigned to Sunset Development). Parcels 1B, 2, and 3A would remain in their existing condition.

Table 5-1 provides a summary of the net square footage of this alternative relative to the proposed project. This alternative would result in a net reduction of 1,222,722 square feet, which represents a 68-percent reduction relative to the proposed project.

Table 5-1: No Project Alternative Summary

Component	Square Footage
Existing vested office entitlement	328,220
Retention of Bishop Ranch 2	194,652
Total	522,872
Net change relative to proposed project	(1,122,722)
Source: Michael Brandman Associates, 2007.	

5.2.1 - Impact Analysis

Aesthetics, Light, and Glare

Under the No Project Alternative, three of the four parcels would remain in their existing condition and would not experience any change. Parcel 1A would be developed as a 328,220-square-foot office complex under the existing vested entitlement. The proposed project’s impacts on scenic vistas visual character were found to be less than significant and did not require mitigation; therefore, the No Project Alternative would also have less than significant impacts on these areas. The No Project Alternative would result in the introduction of substantial new sources of light and glare on Parcel 1A, and mitigation similar to the proposed project would be required to reduce this impact to a level of less than significant. Therefore, the No Project Alternative would have impacts on aesthetics, light, and glare similar to the proposed project.

Air Quality

This alternative would result in a net decrease of 1,122,722 square feet relative to the proposed project. Parcel 1A would be developed as a 328,220-square-foot office complex under the existing vested entitlement. Bishop Ranch 2 would not be demolished, and construction activities would be limited to approximately 13 acres. Construction emissions associated with the entitled development Parcel 1A would occur; however, because of the size of this project, the implementation of standard construction emission measures would be expected to reduce impacts to a level of less than significant. Therefore, this alternative would avoid the significant unavoidable impact associated with construction air emissions. From an operational emissions perspective, the No Project

Alternative would result in a net decrease of 19,725 daily trips, a 79 percent reduction, relative to the proposed project. However, because this alternative would generate 3,178 daily trips, which is more than the approximately 3,000-daily-trip significance established by BAAQMD, the proposed project's operational emissions would be a significant and unavoidable operational air quality impact and, therefore, would be a significant unavoidable cumulative air quality impact. Because the entitled office space is accounted for in BAAQMD's Clean Air Plan, however, this alternative would be consistent with the plan. Therefore, this alternative would avoid the proposed project's significant unavoidable impact associated with inconsistency with the Clean Air Plan. Greenhouse gas emissions would also be emitted at lower levels under this alternative because of the reduction in project intensity; mitigation in the form of energy and water conservation measures would be implemented. Because of the much smaller scale of this alternative, its greenhouse gas emissions would not be considered cumulative considerable. In summary, the No Project Alternative would result in two significant unavoidable air quality impacts, but it would avoid three others that would occur because of the proposed project. Therefore, this alternative would have fewer air quality impacts than the proposed project.

Biological Resources

Parcel 1A would be developed as an office complex under the No Project Alternative. Because Parcel 1A contains habitat suitable for the burrowing owl and nesting birds, this alternative would have the potential to significantly impact special-status wildlife species and would require mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on biological resources similar to the proposed project.

Cultural Resources

Parcel 1A would be developed as an office complex under the No Project Alternative. Because Parcel 1A contains undeveloped land, this alternative would have the potential to significantly impact previously undiscovered buried cultural resources and would require mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on cultural resources similar to the proposed project.

Geology, Soils, and Seismicity

Parcel 1A would be developed as an office complex under the No Project Alternative. Because urban development would occur on Parcel 1A, this alternative would have the potential to create erosion during construction and expose persons or structures to hazards associated with unstable geologic units and expansive soil. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on geology, soils, and seismicity similar to the proposed project.

Hazards and Hazardous Materials

The No Project Alternative would result in the development of 328,220 square feet of office uses on Parcel 1A under the existing vested entitlement. There is the possibility that tenants of this office space could use hazardous materials and would be required to implement mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hazards and hazardous materials similar to the proposed project.

Hydrology and Water Quality

Parcel 1A would be developed as an office complex under the No Project Alternative. Because urban development would occur on Parcel 1A, this alternative would have the potential to create water quality and drainage problems in downstream waterways. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hydrology and water quality similar to the proposed project.

Land Use

Similar to the proposed project, the No Project Alternative would maintain the existing General Plan and Zoning Ordinance designations of the project site. The 328,220-square-foot office complex on Parcel 1A is an existing entitlement and, therefore, is consistent with applicable General Plan and Zoning Ordinance policies. The remaining parcels of the project site would remain in their existing condition and would maintain their consistency with existing General Plan and Zoning Ordinance. Therefore, this alternative would have impacts on land use similar to the proposed project.

Noise

This alternative would result in a net decrease of 1,122,722 square feet relative to the proposed project. Under this alternative, the only new construction would be the development of 328,220 square feet of office uses on Parcel 1A; all other parcels would remain unchanged. Construction activities would be required to implement mitigation similar to the proposed project that would reduce short-term noise impacts to a level of less than significant. Unlike the proposed project, the No Project Alternative does not include any residential uses and, therefore, it would not be necessary to implement the vibration and interior noise control mitigation measures identified for the proposed project. In addition, because the No Project Alternative would generate 19,725 fewer daily trips, it would have a substantial smaller contribution to ambient noise levels on local roadways, although the proposed project's contribution was not determined to be significant. Therefore, the No Project Alternative would have fewer noise impacts than the proposed project.

Population and Housing

This alternative would result in a net decrease of 1,122,722 square feet relative to the proposed project. Under this alternative, 328,220 square feet of entitled office space would be developed on Parcel 1A. No direct population growth would occur under the No Project Alternative, and the

indirect population growth and employment growth created by this alternative have already been accounted for in local and regional forecasts, because this office space is currently entitled. Therefore, population and employment growth that would occur under this alternative would not exceed forecasted population growth assumptions. In contrast, the direct and indirect population growth facilitated by the proposed project would contribute to an exceedance of regional population projections for San Ramon and, therefore, would have a significant unavoidable impact. However, unlike the proposed project, this alternative would not include a residential component and would not contribute to providing affordable housing in accordance with the Regional Housing Needs Assessment allocation for San Ramon. Nonetheless, this alternative avoids a significant unavoidable impact associated with growth inducement while still allowing affordable housing goals to be pursued through other projects and programs. Therefore, this alternative would have fewer impacts on population and housing relative to the proposed project.

Public Services and Recreation

This alternative would result in a net decrease of 1,122,722 square feet relative to the proposed project. Because this alternative would not contain any residential uses and generate far fewer employment opportunities, it would result correspondingly lower impacts on public services and recreation through fewer calls for service, student generation, and park usage. Because this alternative would not include the Plaza District, it would not result in the potentially significant impact requiring mitigation for the Iron Horse Trail. Note that this impact was reduced to a level of less than significant after the implementation of mitigation. The 328,220 square feet of office uses on Parcel 1A would be multi-story structures and would be required to implement mitigation for fire response similar to the proposed project. However, because this alternative would not include a new Police Department headquarters or library, it would not result in the beneficial impacts of increased response times or improved delivery of services from the provision of these facilities. Therefore, the No Project Alternative would have more impacts on public services and recreation than the proposed project.

Transportation

This alternative would result in a net decrease of 1,122,722 square feet relative to the proposed project. Parcel 1A would be developed as a 328,220-square-foot office complex under the existing vested entitlement. When the trips generated by the entitled office uses on Parcel 1A are factored in, the No Project Alternative would generate 19,725 fewer daily trips relative to the proposed project, including 62 fewer trips during the morning peak hour and 409 fewer trips during the afternoon peak hour. While peak-hour trips would be reduced under the No Project Alternative, intersection operation impacts would still occur, and mitigation would be required to reduce impacts to a level of less than significant. In addition, because the development of the vested office entitlement would contribute new trips to Interstate 680 (I-680), which operates at LOS F during certain peak hours, it would have a significant unavoidable impact on freeway operations that is similar to the proposed project. The No Project Alternative would not modify intersections on Camino Ramon, Sunset Drive,

or other roadways and would avoid creating potentially significant queuing impacts; therefore, it would not need to implement mitigation to reduce this impact to a level of less than significant. In addition, the No Project Alternative would not narrow Camino Ramon to two lanes during the non-commute hours and would avoid the potentially significant impact requiring mitigation associated with that aspect of the proposed project. The No Project Alternative would be subject to City motorcycle parking and bicycle storage requirements and would implement mitigation similar to the proposed project for these issues. Because the No Project Alternative would not create the potentially significant queuing and roadway hazard impacts requiring mitigation, it would have fewer impacts on transportation than the proposed project.

Urban Decay

No new commercial retail uses would be developed under the No Project Alternative. In contrast, the proposed project would develop more than 600,000 square feet of retail uses as well as a 169-room hotel. As described in Section 4.13, Urban Decay, the proposed project's commercial retail uses would not be expected to cause store closures or long-term vacancies that would create physical deterioration associated with urban decay, and the proposed project would have a less than significant impact on this topical area. Therefore, the No Project Alternative would have impacts on urban decay similar to the proposed project.

Utility Systems

The No Project Alternative would result in the development of 328,220 square feet of office uses on Parcel 1A and the retention of the existing uses on all other parcels. The reduced development intensity of this alternative would have correspondingly less demand for potable water relative to the proposed project. Nonetheless, because of the intensity of the office uses, this alternative would be required to implement water conservation mitigation measures similar to those of the proposed project to reduce potentially significant potable water impacts to a level of less than significant. The proposed project's wastewater and storm drainage impacts were determined to be less than significant and, therefore, the No Project Alternative would have less than significant impacts on these utility systems. The No Project Alternative would not require the demolition of Bishop Ranch 2 nor would involve the development of the proposed project's 2.1 million square feet of new buildings. As such, it would be expected to have a substantial reduction in construction waste generation; however, the development of 328,220 square feet of office uses would be considered significant enough to require construction and demolition debris recycling mitigation. In addition, this alternative would also generate substantial amounts of operational solid waste and require mitigation similar to the proposed project to reduce potential impacts to a level of less than significant. Finally, while the No Project Alternative would have a substantially lower demand for energy, it would still require the implementation of similar energy conservation mitigation to reduce potential impacts to a level of less than significant. Therefore, the No Project Alternative would have impacts on utility systems similar to the proposed project.

5.2.2 - Conclusion

The No Project Alternative would have fewer impacts on noise, population and housing, and transportation, but would have a greater impact on public services and recreation than the proposed project. All other impacts would be similar to the proposed project. The No Project would meet the project objectives related to providing high-quality architecture and landscaping and enhancing property values; however, it would not meet the objectives of improving public facilities and delivery of services, developing a mixed-use district, creating new property and sales tax revenues, increasing housing options, reducing greenhouse gases, and enhancing mobility.

5.3 - Alternative 2 - Reduced Density Option 1 Alternative

The Reduced Density Option 1 Alternative consists of eliminating the Plaza District from the proposed project and developing only Bishop Ranch 1A and the City Hall and Transit Center. Bishop Ranch 1A and the City Hall and Transit Center would be identical in size, design, and use as envisioned by the proposed project. This alternative would amend the City/Chevron Annexation and Development agreement (since assigned to Sunset Development) to modify the existing 328,220-square-foot office entitlement to allow for the development of Bishop Ranch 1A. Parcels 2 and 3A would remain in their existing condition.

Table 5-2 provides a summary of the net square footage of this alternative relative to the proposed project. This alternative would result in a net reduction of 968,903 square feet, which represents a 60-percent reduction relative to the proposed project.

Table 5-2: Reduced Density Option 1 Alternative Summary

Component	Square Footage
Bishop Ranch 1A	681,769
City Hall and Transit Center	110,490
Existing vested office entitlement	(328,220)
Retention of Bishop Ranch 2	194,652
Total	658,691
Net change relative to proposed project	(986,903)
Source: Michael Brandman Associates, 2007.	

5.3.1 - Impact Analysis

Aesthetics, Light, and Glare

This alternative would result in the development of close to 800,000 square feet of office and civic uses as well as parking structures on Parcels 1A and 1B and the retention of the Bishop Ranch 2 office complex, for a net development of 986,903 square feet on the project site. The proposed project's impacts on the visual character of scenic vistas were found to be less than significant and did not require mitigation; therefore, the Reduced Density Option 1 Alternative would also have less than

significant impacts on these areas. This alternative would result in the introduction of substantial new sources of light and glare on Parcels 1A and 1B, and mitigation similar to the proposed project would be required to reduce this impact to a level of less than significant. Therefore, the Reduced Density Option 1 Alternative would have impacts on aesthetics, light, and glare similar to the proposed project.

Air Quality

This alternative would result in a net decrease of 986,903 square feet of development relative to the proposed project. Construction emissions associated with Bishop Ranch 1A and City Hall would occur and be substantial; mitigation in the form of construction air pollution control measures would be required, but, because of the size and intensity of this alternative, it would not fully reduce this impact to a level of less than significant. Therefore, construction air emissions would be significant and unavoidable under this alternative. From an operational emissions perspective, this alternative would result in a net decrease of 15,017 daily trips, a 40-percent reduction, relative to the proposed project. However, because this alternative would generate 9,909 daily trips, which is more than the approximately 3,000-daily-trip significance established by BAAQMD, the proposed project's operational emissions would be a significant and unavoidable impact. Because both construction and operational emissions would be significant and unavoidable, this alternative would also have a significant and unavoidable cumulative air quality impact. This alternative would also generate population growth and vehicle trips that would exceed the projections contained in the Clean Air Plan and, therefore, would have a significant unavoidable impact associated with inconsistency with the plan. Mitigation would be required for greenhouse gas emissions and would be similar to the proposed project; however, because of the size and intensity of this alternative, its greenhouse gas emissions would be cumulatively considerable. In summary, this alternative would result in the same significant unavoidable air quality impacts associated with the proposed project, and therefore, would have impacts on air quality similar to the proposed project.

Biological Resources

This alternative would result in the development of close to 800,000 square feet of new office and civic uses as well as parking structures on Parcels 1A and 1B. Because Parcel 1A contains habitat suitable for the burrowing owl and nesting birds, this alternative would have the potential to significantly impact special-status wildlife species and would require mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on biological resources similar to the proposed project.

Cultural Resources

This alternative would result in the development of close to 800,000 square feet of new office and civic uses, as well as parking structures, on Parcels 1A and 1B. Because Parcel 1A contains undeveloped land, this alternative would have the potential to significantly impact previously undiscovered buried cultural resources and would require mitigation similar to the proposed project.

The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on cultural resources similar to the proposed project.

Geology, Soils, and Seismicity

This alternative would result in the development of close to 800,000 square feet of new office and civic uses, as well as parking structures, on Parcels 1A and 1B. Because urban development would occur on Parcel 1A, this alternative would have the potential to create erosion during construction and expose persons or structures to hazards associated with unstable geologic units and expansive soil. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on geology, soils, and seismicity similar to the proposed project.

Hazards and Hazardous Materials

This alternative would result in the development of close to 800,000 square feet of new office and civic uses, as well as parking structures, on Parcels 1A and 1B. There is the possibility that tenants of Bishop Ranch 1A or City Hall could use hazardous materials and would be required to implement mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hazards and hazardous materials similar to the proposed project.

Hydrology and Water Quality

Parcels 1A and 1B would be developed with close to 800,000 square feet of new office and civic uses as well as parking structures, under this alternative. Because urban development would occur on these parcels, this alternative would have the potential to create water quality and drainage problems in downstream waterways. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hydrology and water quality similar to the proposed project.

Land Use

Similar to the proposed project, this alternative would maintain the existing General Plan and Zoning Ordinance designations of the project site. Both Bishop Ranch 1A and City Hall would consistent with applicable General Plan and Zoning Ordinance policies. The remaining parcels of the project site would remain in their existing condition and would maintain their consistency with the existing General Plan and Zoning Ordinance. Therefore, this alternative would have impacts on land use similar to the proposed project.

Noise

This alternative would result in a net decrease of 986,903 square feet of development relative to the proposed project. Construction would be limited to Parcels 1A and 1B; no demolition or construction emissions would occur on Parcel 2 or 3A. Construction activities would be required to implement

mitigation similar to the proposed project that would reduce short-term noise impacts to a level of less than significant. However, unlike the proposed project, this alternative does not include any residential uses and, therefore, it would not be necessary to implement the vibration and interior noise control mitigation measures identified for the proposed project. In addition, because this alternative would generate 15,017 fewer daily trips, it would have a substantially smaller contribution to ambient noise levels on local roadways, although the proposed project's contribution was not determined to be significant. Therefore, this alternative would have fewer noise impacts than the proposed project.

Population and Housing

This alternative would result in a net decrease of 986,903 square feet of development relative to the proposed project. No direct population growth would occur under this alternative, and the indirect population growth and employment growth created would be less than half as much as the proposed project. Therefore, population and employment growth that would occur under this alternative would not exceed forecasted population growth assumptions. In contrast, the direct and indirect population growth facilitated by the proposed project would contribute to an exceedance of regional population projections for San Ramon and, therefore, have a significant unavoidable impact. However, unlike the proposed project, this alternative would not include a residential component and would not contribute to providing affordable housing in accordance with the Regional Housing Needs Assessment allocation for San Ramon. Nonetheless, this alternative avoids a significant unavoidable impact associated with growth inducement while still allowing affordable housing goals to be pursued through other projects and programs. Therefore, this alternative would have fewer impacts on population and housing relative to the proposed project.

Public Services and Recreation

This alternative would result in a net decrease of 986,903 square feet of development relative to the proposed project. Because this alternative would not contain any residential uses and generate far fewer employment opportunities, it would result in correspondingly lower impacts on public services and recreation through fewer calls for service, student generation, and park usage. Because this alternative would not include the Plaza District, it would not result in the potentially significant impact requiring mitigation for the Iron Horse Trail. Note that this impact was reduced to a level of significant after the implementation of mitigation. Bishop Ranch 1A and City Hall would be multi-story structures and would be required to implement mitigation for fire response similar to the proposed project. This alternative would include a new Police Department headquarters and library and would have similar beneficial impacts associated with increased response times and improved delivery of services from the provision of these facilities. Therefore, this alternative would have impacts on public services and recreation similar to the proposed project.

Transportation

This alternative would result in a net decrease of 986,903 square feet of development relative to the proposed project. Bishop Ranch 1A would be developed in place of the existing entitlement for 328,220 square feet of office uses; City Hall would also be developed and Bishop Ranch 2 would be

retained. When all of these conditions are factored in, the alternative would generate 15,017 fewer daily trips relative to the proposed project, including 966 fewer trips during the afternoon peak hour, although there would be 72 more trips during the morning peak hour because of the retention of Bishop Ranch 2. While afternoon peak-hour trips would be reduced under this alternative, intersection operation impacts would still occur and mitigation would be required to reduce impacts to a level of less than significant. In addition, because this alternative would contribute new trips to I-680, which operates at LOS F during certain peak hours, it would have a similar significant unavoidable impact on freeway operations as the proposed project. This alternative would not modify intersections on Camino Ramon, Sunset Drive or other roadways and would avoid creating potentially significant queuing impacts; therefore, it would not need to implement mitigation to reduce these impacts to a level of less than significant. In addition, this alternative would not narrow Camino Ramon to two lanes during the non-commute hours and would avoid the potentially significant impact requiring mitigation associated with that aspect of the proposed project. This alternative would be subject to City motorcycle parking and bicycle storage requirements and would implement mitigation similar to the proposed project for these issues. This alternative would include a Transit Center and would create the beneficial impacts associated with more convenient public transit facilities. Because this alternative would not create potentially significant queuing and roadway hazard impacts requiring mitigation, it would have fewer impacts on transportation than the proposed project.

Urban Decay

No commercial retail uses would be developed under this alternative. In contrast, the proposed project would develop more than 600,000 square feet of retail uses as well as 169-room hotel. As described in Section 4.13, Urban Decay, the proposed project's commercial retail uses would not be expected to cause store closures or long-term vacancies that would create physical deterioration associated with urban decay and the proposed project would have less than significant impact in relation to this topical area. Therefore, this alternative would have impacts on urban decay similar to the proposed project.

Utility Systems

This alternative would result in the development of close to 800,000 square feet of new office and civic uses, as well as parking structures, on Parcels 1A and 1B. The reduced development intensity of this alternative would have correspondingly less demand for potable water relative to the proposed project. Nonetheless, because of the intensity of the office and civic uses, this alternative would be required to implement water conservation mitigation measures similar to those of the proposed project to reduce potentially significant potable water impacts to a level of less than significant. The proposed project's wastewater and storm drainage impacts were determined to be less than significant and, therefore, this alternative would have less than significant impacts on these utility systems. This alternative would not require the demolition of Bishop Ranch 2 and would develop 1.3 million fewer square feet of new buildings. As such, it would be expected to have a substantial reduction in

construction waste generation; however, the development of close to 800,000 square feet of office and civic uses would be considered significant enough to require construction and demolition debris recycling mitigation. In addition, this alternative would also generate substantial amounts of operational solid waste and require mitigation similar to the proposed project to reduce potential impacts to a level of less than significant. Finally, while this alternative would have a substantially lower demand for energy, it would still implement similar energy conservation mitigation to reduce potential impacts to a level of less than significant. Therefore, this alternative would have impacts on utility systems similar to the proposed project.

5.3.2 - Conclusion

The Reduced Density Option 1 Alternative would have fewer impacts on noise, population and housing, and transportation than the proposed project. All other impacts would be similar to the proposed project. The Reduced Density Option 1 Alternative would meet the project objectives related to improving public facilities and the delivery of services, providing high-quality architecture and landscaping, and enhancing property values; however it would not meet the objectives related to developing a mixed-use district, creating new property and sales tax revenues, increasing housing options, reducing greenhouse gases, and enhancing mobility.

5.4 - Alternative 3 - Reduced Density Option 2 Alternative

The Reduced Density Option 2 Alternative consists of eliminating the Bishop Ranch 1A and the City Hall and Transit Center components and developing only the Plaza District. The Plaza District would be identical in size, design, and use as envisioned by the proposed project. Under this alternative, the existing vested entitlement on Parcel 1A for 328,220 square feet of office uses would be exercised. Parcel 1B would remain in its existing condition.

Table 5-3 provides a summary of the net square footage of this alternative relative to the proposed project. This alternative would result in a net reduction of 135,819 square feet, which represents an 8 percent reduction relative to the proposed project.

Table 5-3: Reduced Density Option 2 Alternative Summary

Component	Square Footage
Plaza District	1,376,207
Existing vested office entitlement	328,220
Removal of Bishop Ranch 2	(194,652)
Total	1,509,775
Net change relative to proposed project	(135,819)
Source: Michael Brandman Associates, 2007.	

5.4.1 - Impact Analysis

Aesthetics, Light, and Glare

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. The proposed project's impacts on scenic vistas visual character were found to be less than significant and did not require mitigation; therefore, this alternative would also have less than significant impacts on these areas. This alternative would result in the introduction of substantial new sources of light and glare on Parcels 1A and 3A and the intensification of existing sources on Parcel 2. Mitigation similar to the proposed project would be required to reduce this impact to a level of less than significant.

Therefore, this alternative would have impacts on aesthetics, light, and glare similar to the proposed project.

Air Quality

This alternative would result in a net decrease of 135,819 square feet of development relative to the proposed project. Construction emissions associated with the Plaza District and the entitled office space would occur and be substantial; mitigation in the form of construction air pollution control measures would be required, but because of the size and intensity of this alternative, they would not reduce the impact to a level of less than significant. Therefore, construction air emissions would be significant and unavoidable under this alternative. From an operational emissions perspective, this alternative would result in a net decrease of 2,685 daily trips, an 8 percent reduction, relative to the proposed project. However, because this alternative would generate 22,241 daily trips, which is more than the approximately 3,000-daily-trip significance established by BAAQMD, the proposed project's operational emissions would be a significant and unavoidable impact. Because both construction and operational emissions would be significant and unavoidable, this alternative would also have a significant and unavoidable cumulative air quality impact. This alternative would also generate population growth and vehicle trips that would exceed the projections contained in the Clean Air Plan and, therefore have a significant unavoidable impact associated with inconsistency with the plan. Mitigation would be required for greenhouse gas emissions and would be similar to the proposed project; however, because of the size and intensity of this alternative, its greenhouse gas emissions would be cumulatively considerable. In summary, this alternative would result in the same significant unavoidable air quality impacts associated with the proposed project, and therefore, would have impacts on air quality similar to the proposed project.

Biological Resources

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. Because Parcels 1A, 2, and 3A contains habitat suitable for the burrowing owl or nesting birds, this alternative would have the potential to significantly impact special-status wildlife species and would require mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of

less than significant. Therefore, this alternative would have impacts on biological resources similar to the proposed project.

Cultural Resources

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. Because Parcels 1A and 3A contain undeveloped land, this alternative would have the potential to significantly impact previously undiscovered buried cultural resources and would require mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on cultural resources similar to the proposed project.

Geology, Soils, and Seismicity

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. Because urban development would occur on Parcels 1A and 3A, this alternative would have the potential to create erosion during construction and expose persons or structures to hazards associated with unstable geologic units and expansive soil. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on geology, soils, and seismicity similar to the proposed project.

Hazards and Hazardous Materials

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. There is the possibility that tenants of the Plaza District and the entitled office space could use hazardous materials and would be required to implement mitigation similar to the proposed project. The implementation of mitigation would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hazards and hazardous materials similar to the proposed project.

Hydrology and Water Quality

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. Because urban development would occur on these parcels, this alternative would have the potential to create water quality and drainage problems in downstream waterways. As such, this alternative would require mitigation similar to the proposed project, the implementation of which would reduce impacts to a level of less than significant. Therefore, this alternative would have impacts on hydrology and water quality similar to the proposed project.

Land Use

Similar to the proposed project, this alternative would maintain the existing General Plan and Zoning Ordinance designations of the project site. Both the Plaza District and the entitled office space would be consistent with applicable General Plan and Zoning Ordinance policies. Parcel 1B would remain in its existing condition and would maintain its consistency with existing General Plan and Zoning Ordinance. Therefore, this alternative would have impacts on land use similar to the proposed project.

Noise

This alternative would result in a net decrease of 135,819 square feet of development relative to the proposed project. Construction would occur on Parcels 1A, 2, and 3A and consist of 1.7 million square feet of new mixed-use and office development. Construction activities would be required to implement mitigation similar to the proposed project that would reduce short-term noise impacts to a level of less than significant. Similar to the proposed project, this alternative includes residential uses and, therefore, it would be necessary to implement the vibration and interior noise control mitigation measures identified for the proposed project. In addition, because this alternative would generate 2,685 fewer daily trips, it would have a smaller contribution to ambient noise levels on local roadways, although the proposed project's contribution was not determined to be significant. Therefore, this alternative would have noise impacts similar to the proposed project.

Population and Housing

This alternative would result in a net decrease of 135,819 square feet of development relative to the proposed project. Direct population growth would occur under this alternative and would be equivalent to the proposed project. Employment opportunities created by this alternative would be slightly less than the proposed project because of the smaller size of the office entitlement relative to Bishop Ranch 1A. The direct and indirect population growth facilitated by the proposed project would contribute to an exceedance of regional population projections for San Ramon and, therefore, have a significant unavoidable impact. Because the population and employment growth that would occur under this alternative would not be significantly different from the proposed project, it would also have a significant unavoidable impact related to growth inducement. Similar to the proposed project, this alternative would include a residential component and would contribute to providing affordable housing in accordance with the Regional Housing Needs Assessment allocation for San Ramon. Therefore, this alternative would have impacts on population and housing similar to the proposed project.

Public Services and Recreation

This alternative would result in a net decrease of 135,819 square feet of development relative to the proposed project. Because this alternative would contain residential uses and would generate a substantial number of new employment opportunities, it would result in similar demands on public services and recreation through fewer calls for service, student generation, and park usage as the proposed project. This alternative would increase use of the Iron Horse Trail and require the

mitigation measure related to increased trail usage that would reduce impacts to a level of less than significant. The Plaza District and the entitled office space would be multi-story structures and would be required to implement mitigation for fire response similar to the proposed project. Unlike the proposed project, this alternative would not include the City Hall and, therefore, would not provide a new Police Department headquarters and library. Therefore, this alternative would not create the beneficial impacts associated with increased response times and improved delivery of services from the provision of these facilities. As such, this alternative would have more impacts on public services and recreation than the proposed project.

Transportation

This alternative would result in a net decrease of 135,819 square feet of development relative to the proposed project. Development of the Plaza District would result in the removal of Bishop Ranch 2 and, therefore, remove those existing trips from local roadways. This alternative also assumes that the existing 328,220-square-foot, vested office entitlement on Parcel 1A would be developed. When all of these conditions are factored in, this alternative would generate 2,685 fewer daily trips relative to the proposed project, including 133 fewer trips during the morning peak hour and 263 fewer trips during the afternoon peak hour. While peak-hour trips would be reduced under this alternative, intersection operation impacts would still occur and mitigation would be required to reduce impacts to a level of less than significant. In addition, because this alternative would contribute new trips to I-680, which operates at LOS F during certain peak hours, it would have a similar significant unavoidable impact on freeway operations as the proposed project. Similar to the proposed project, this alternative would also create a potentially significant impact associated with queuing because it would implement the substantial intersection modifications associated with the Plaza District that would result in several 95th percentile queues exceeding available storage capacity. As with the proposed project, this alternative would narrow Camino Ramon to two lanes during the non-commute hours and would create a potentially significant impact requiring mitigation. This alternative would be subject to City motorcycle parking and bicycle storage requirements and would implement similar mitigation as the proposed project for these issues. However, unlike the proposed project, this alternative would not include a transit center and would not create the beneficial impacts associated with more convenient public transit facilities. Therefore, this alternative would have impacts on transportation similar to the proposed project.

Urban Decay

The commercial retail uses developed under this alternative would be identical in square footage and nature to the proposed project. As described in Section 4.13, Urban Decay, the proposed project's commercial retail uses would not be expected to cause store closures or long-term vacancies that would create physical deterioration associated with urban decay and the proposed project would have less than significant impact in relation to this topical area. Therefore, this alternative would have impacts on urban decay similar to the proposed project.

Utility Systems

This alternative would result in the development of more than 1.7 million square feet of new mixed-use and office development, as well as parking structures, on Parcels 1A, 2, and 3. Because there would be only a net reduction of 135,819 square feet relative to the proposed project, potable water demand would be similar to the proposed project. As such, this alternative would be required to implement water conservation mitigation measures similar to those of the proposed project to reduce potentially significant potable water impacts to a level of less than significant. The proposed project's wastewater and storm drainage impacts were determined to be less than significant and, therefore, this alternative would have less than significant impacts on these utility systems. This alternative would involve the demolition of Bishop Ranch 2 and would develop more than 1.7 million square feet of new buildings. As such, it would generate substantial amounts of construction waste and would require construction and demolition debris recycling mitigation. In addition, this alternative would also generate substantial amounts of operational solid waste and require mitigation similar to the proposed project to reduce potential impacts to a level of less than significant. Finally, while this alternative would have a lower demand for energy than the proposed project, it would still implement similar energy conservation mitigation to reduce potential impacts to a level of less than significant. Therefore, this alternative would have impacts on utility systems similar to the proposed project.

5.4.2 - Conclusion

The Reduced Density Option 2 Alternative would not have fewer impacts on any topical area relative to the proposed project and would have greater impacts on public services and recreation. However, this alternative meets most of the project objectives to the same degree as the proposed project, particularly those related to creating a mixed-use district, providing high-quality architecture and landscaping, and enhancing property values; nevertheless, it would not meet the objectives related to improving public facilities, integrating civic uses within the mixed-use district, and the delivery of services or enhancing mobility.

5.5 - Alternative 4 - City Civic Center Alternative

The City Civic Center Alternative consists of developing the project detailed in City Civic Center Environmental Impact Report, certified by the San Ramon City Council in December 2003. The City Civic Center Project proposed 276,000 square feet of civic and commercial uses, including City offices, Council Chambers, a library, a children's museum, a 1,200-seat performing arts center with a smaller 300-seat theater, 40,000 square feet of retail on Parcel 3A, and an aquatic center on the City-owned portion of Parcel 1A. These uses would use the existing Bishop Ranch 3 parking structure located immediately north of Parcel 3A.

The square footage for the Parcel 3A components are as follows:

- City Offices and Council Chambers: 70,000 square feet

- Library: 50,000 square feet
- Children’s Museum: 20,000 square feet
- Center for Arts and Visual Arts Gallery: 96,000 square feet
- Retail: 40,000 square feet

The aquatic center would feature an Olympic-sized pool with stadium-style seating for 3,000 spectators and locker room facilities.

This alternative would amend the existing City/Chevron Annexation and Development Agreement (since assigned to Sunset Development) to modify the existing 328,220-square-foot office entitlement to allow for the development of the aquatic center. Parcels 1B and 2 would remain in their existing condition.

Table 5-4 provides a summary of the net square footage of this alternative relative to the proposed project. This alternative would result in a net reduction of 1,503,162 square feet, which represents a 91-percent reduction relative to the proposed project.

Table 5-4: City Civic Center Alternative Summary

Component	Square Footage
City Civic Center	276,000
Existing vested office entitlement	(328,220)
Retention of Bishop Ranch 2	194,652
Total	142,432
Net change relative to proposed project	(1,503,162)
Source: Michael Brandman Associates, 2007.	

The impacts analysis below summarizes the conclusions presented in the previously certified City Civic Center EIR.

5.5.1 - Impact Analysis

Aesthetics, Light, and Glare

The City Civic Center EIR concluded that all impacts on aesthetics, light, and glare would be less than significant and would not require mitigation. In contrast, the proposed project would have a potentially significant impact on light and glare and would require mitigation to reduce this impact to a level of less than significant. Therefore, this alternative would have fewer impacts on aesthetics, light, and glare relative to the proposed project.

Air Quality

The City Civic Center EIR concluded that all air quality impacts could be mitigated to a level of less than significant. This includes construction emissions, which would be reduced to a level of less than

significant through implementation of standard air pollution control measures, and operational emissions, which would be less than significant and would not require mitigation. Because these impacts would be less than significant after mitigation, there would be no significant cumulative air quality impacts. In addition, the EIR found that the City Civic Center Alternative would be consistent with the projections contained in the Clean Air Plan. In contrast, the proposed project would have significant unavoidable impacts associated with all of the aforementioned areas. Note that the City Civic Center EIR did not consider greenhouse gas emissions. However, with the implementation of energy and water efficiency measures similar to those of the proposed project, it can be assumed that this alternative would not have a cumulatively considerable impact associated with greenhouse gas emissions because of its reduced size and intensity. Therefore, this alternative would have fewer air quality impacts than the proposed project.

Biological Resources

The City Civic Center EIR concluded that all biological resources impacts were less than significant and did not require mitigation. In contrast, the proposed project would have a potentially significant impact on special status wildlife species and would require mitigation to reduce this impact to a level of less than significant. Therefore, this alternative would have fewer impacts on biological resources than the proposed project.

Cultural Resources

The City Civic Center EIR concluded that all cultural resources impacts were less than significant and did not require mitigation. In contrast, the proposed project would have potentially significant impacts on historic, archaeological, and paleontological resources and burial sites, and it would require mitigation to reduce these impacts to a level of less than significant. Therefore, this alternative would have fewer impacts on cultural resources than the proposed project.

Geology, Soils, and Seismicity

The City Civic Center EIR concluded that all geology, soils, and seismicity impacts could be mitigated to a level of less than significant. Mitigation was required for seismic-related hazards and unstable geologic units and is similar to the mitigation required to the proposed project. Therefore, this alternative would have impacts on geology, soils, and seismicity similar to the proposed project.

Hazards and Hazardous Materials

The City Civic Center EIR concluded that all hazards and hazardous materials impacts were less than significant and did not require mitigation. In contrast, the proposed project would have potentially significant impact related to potential hazardous materials usage and would require mitigation to reduce this impact to a level of less than significant. Therefore, this alternative would have fewer impacts on hazards and hazardous materials than the proposed project.

Hydrology and Water Quality

The City Civic Center EIR concluded that all hydrology and water quality impacts could be mitigated to a level of less than significant. Mitigation was required for construction and operational water quality and is similar to the mitigation required to the proposed project. However, the proposed project would also have a potentially significant impact on drainage that would require mitigation to reduce it to a level of less than significant. Therefore, this alternative would have fewer impacts on hydrology and water quality than the proposed project.

Land Use

The City Civic Center EIR concluded that all land use impacts were less than significant and did not require mitigation. The proposed project's land use impacts also would be less than significant and would not require mitigation. Therefore, this alternative would have impacts on land use similar to the proposed project.

Noise

The City Civic Center EIR concluded that all noise impacts could be mitigated to a level of less than significant. Construction noise impacts would be mitigated to a level of less than significant with noise control measures similar to the proposed project. Similar to the proposed project, the City Civic Center alternative would not result in substantial increases in roadway noise levels or onsite noise that would adversely impact nearby sensitive receptors. However, this alternative would not contain any residential uses and, therefore, would not require the proposed project's mitigation for potential impacts associated with onsite noise or vibration. Therefore, this alternative would have fewer noise impacts than the proposed project.

Population and Housing

The City Civic Center EIR concluded that all population and housing impacts were less than significant and did not require mitigation. In contrast, the proposed project would have a significant unavoidable impact on growth inducement because it would contribute to population growth in excess of regional projections. However, unlike the proposed project, this alternative would not include a residential component and would not contribute to providing affordable housing in accordance with the Regional Housing Needs Assessment allocation for San Ramon. Nonetheless, this alternative avoids a significant unavoidable impact associated with growth inducement while still allowing affordable housing goals to be pursued through other projects and programs. Therefore, this alternative would have fewer impacts on population and housing relative to the proposed project.

Public Services and Recreation

The City Civic Center EIR concluded that all public services and recreation impacts were less than significant and did not require mitigation. In contrast, the proposed project would have potentially significant impacts on fire protection and trails that would require mitigation to reduce them to a level of less than significant. Therefore, this alternative would have fewer impacts on public services and recreation than the proposed project.

Transportation

The City Civic Center EIR concluded that all transportation impacts could be mitigated to a level of less than significant. This alternative would result in potentially significant impacts associated with intersection operations; parking, bicycle, and pedestrian access to the Iron Horse Trail; and construction truck traffic. Mitigation would reduce all potentially significant transportation impacts to a level of less than significant. In comparison, the proposed project would also have potentially significant impacts associated with intersection operations, parking, bicycle use, and construction traffic, as well as significant impacts associated with freeway operations, queuing, and hazards associated with narrowing Camino Ramon to two lanes during non-commute hours. Mitigation is proposed for intersection operations, queuing, roadway hazards, parking, bicycle use, and construction traffic, and these impacts would be reduced to a level of less than significant after mitigation. No mitigation is available for freeway operations impacts, and this would be significant and unavoidable. Therefore, this alternative would have fewer transportation impacts than the proposed project.

Urban Decay

The City Civic Center EIR did not consider urban decay impacts. However, because this alternative has only 40,000 square feet of commercial retail uses, it can be assumed to have much lower economic impact relative to the proposed project. As described in Section 4.13, Urban Decay, the proposed project's commercial retail uses would not be expected to cause store closures or long-term vacancies that would create physical deterioration associated with urban decay, and the proposed project would have less than significant impact in relation to this topical area. Therefore, this alternative would have impacts on urban decay similar to the proposed project.

Utility Systems

The City Civic Center EIR concluded that all utility system impacts could be mitigated to a level of less than significant. Mitigation was required for water supply and infrastructure impacts and consisted of fees for new conveyance facilities and water conservation measures to reduce potential impacts to a level of less than significant. The proposed project would also result in a significant increase in potable water demand and would implement water conservation measures to reduce the impact to a level of less than significant. However, the proposed project would generate substantial quantities of solid waste and demand substantial amounts of energy; both are potentially significant impacts requiring mitigation to reduce potential impacts to a level of less than significant. Therefore, this alternative would have fewer impacts on utility systems than the proposed project.

5.5.2 - Conclusion

The City Civic Center Alternative would result in fewer impacts on 11 topical areas relative to the proposed project and similar impacts on the remaining three topical areas. This alternative would partially meet the project objectives, particularly those related to improving public facilities and the delivery of services, providing high-quality architecture and landscaping, and enhancing property values; however it would not meet the objectives related to developing a mixed-use district, creating

new property and sales tax revenues, increasing housing options, reducing greenhouse gases, and enhancing mobility. Moreover, the financial viability of this alternative is extremely uncertain because the development of the facilities associated with the City Civic Center proposal is estimated to cost \$160 million. This cost would be borne entirely by the City of San Ramon, and there are significant concerns about the fiscal prudence of the City taking on such a substantial financial burden. In addition, several of the facilities included in this alternative (e.g., the aquatic center, the performing arts center, and the children’s museum) have been developed elsewhere in San Ramon or nearby communities since the certification of the EIR in 2003 and, therefore, would not be considered feasible project components.

5.6 - Environmentally Superior Alternative

The environmental effects of each alternative in relation to the proposed project are summarized in Table 5-5.

Table 5-5: Summary of Alternatives

Environmental Topic Area	No Project Alternative	Reduced Density Alternative - Option 1	Reduced Density Alternative - Option 2	City Civic Center Alternative
Aesthetics, Light, and Glare	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Air Quality	Fewer Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Biological Resources	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Cultural Resources	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Geology, Soils, and Seismicity	Similar Impacts	Similar Impacts	Similar Impacts	Similar Impacts
Hazards and Hazardous Materials	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Hydrology and Water Quality	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts
Land Use	Similar Impacts	Similar Impacts	Similar Impacts	Similar Impacts
Noise	Fewer Impacts	Fewer Impacts	Similar Impacts	Fewer Impacts
Population and Housing	Fewer Impacts	Fewer Impacts	Similar Impacts	Fewer Impacts
Public Services and Recreation	More Impacts	Similar Impacts	More Impacts	Fewer Impacts
Transportation	Fewer Impacts	Fewer Impacts	Similar Impacts	Fewer Impacts
Urban Decay	Fewer Impacts	Similar Impacts	Similar Impacts	Similar Impacts
Utility Systems	Similar Impacts	Similar Impacts	Similar Impacts	Fewer Impacts

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an “environmentally superior alternative.” If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

Each of the proposed alternatives would have fewer environmental impacts relative to the proposed project, with the City Civic Center Alternative having the fewest. Therefore, this alternative would be the environmentally superior alternative.

5.7 - Alternatives Rejected From Further Consideration

The following alternative was initially considered but was rejected from further consideration for the reasons described below.

Alternative Location

For an alternative location to be feasible to support the proposed project, it would need to meet the following criteria:

- Be located within the limits or the sphere of influence of the City of San Ramon.
- Contain a minimum of 40 acres, with the acreage being either contiguous or separated only by streets.
- Be designated for commercial, office, or mixed-uses by the City of San Ramon General Plan.
- Be located at an intersection on a highly visible commercial corridor (e.g., San Ramon Valley Boulevard, Crow Canyon Road, Bollinger Canyon Road, Alcosta Boulevard, or Camino Ramon).
- Be under the ownership of either Sunset Development or the City of San Ramon.

No alternative locations meet all of these criteria and, therefore, are not considered feasible sites for the proposed project.

SECTION 6: OTHER CEQA CONSIDERATIONS

6.1 - Significant Unavoidable Impacts

CEQA Guidelines Section 15126.2(a)(b) requires an EIR to identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented.

Previously Certified Environmental Documents

The previously certified City of San Ramon General Plan EIR identified the following impact as a significant unavoidable effect of buildout of the General Plan:

- **Inconsistency with the Clean Air Plan:** Population growth and vehicle trips associated with buildout of the City of San Ramon General Plan would exceed the projections contained in the BAAQMD Clean Air Plan. The City Council adopted a Statement of Overriding Considerations for the significant unavoidable impact.

The previously certified City Civic Center EIR concluded that the residual significance of all potentially significant impacts would be less than significant after mitigation, and no significant unavoidable impacts would occur.

Proposed Project

This section describes significant impacts of the proposed project, including those that can be mitigated but not reduced to a level of less than significant. Where there are impacts that cannot be alleviated without imposing a project alternative, their implications, and the reason why the project is being proposed, notwithstanding their effect, are described. With implementation of the proposed project, six impacts related to air quality, population and housing, and transportation that cannot be avoided would occur. Each significant unavoidable impact is discussed below.

- **Construction and operational air emissions:** Daily emissions from project construction and operational activities would exceed Bay Area Air Quality Management District (BAAQMD) thresholds. Mitigation is proposed that would require implementation of air pollution control measures; however, these measures would not fully reduce this impact to a level of less than significant.
- **Cumulative air emissions:** Because construction and operational emissions would exceed BAAQMD thresholds, the proposed project would have a significant cumulative impact. No mitigation is available to reduce this impact to a level of less than significant.
- **Inconsistency with the Clean Air Plan:** Population growth and vehicle trips associated with the proposed project would exceed the projections contained in the BAAQMD Clean Air Plan. No mitigation is available to reduce this impact to a level of less than significant.

- **Greenhouse gas emissions:** The size and intensity of the proposed project would have a cumulatively considerable contribution to greenhouse gas emissions. Mitigation is proposed that would require implementation of energy and water conservation measures; however, these measures would not fully reduce this impact to a level of less than significant.
- **Growth inducement:** Population growth attributable to the proposed project would exceed Association of Bay Area Government's (ABAG) projections for San Ramon. No mitigation is available to reduce this impact to a level of less than significant.
- **Freeway operations:** The proposed project would contribute new vehicle trips to Interstate 680 (I-680), which currently operates a deficient level of service. No mitigation is available to reduce this impact to a level of less than significant.

6.2 - Growth-Inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines Section 15126.2[d]).

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area, such as a new residential community, that requires additional commercial uses to support residents.

The proposed project would result in the development of more than 2.1 million square feet of mixed-uses, including residential, commercial retail, office, and civic on 44 acres in an existing urbanized area. The residential units included in the proposed project would be expected to result in direct population growth of 1,264 new residents. The proposed project is expected to create 3,636 new jobs, and it is conservatively estimated that half of the employees (1,818) will relocate to San Ramon. In total, the proposed project is projected to add 3,082 new residents to San Ramon's population.

ABAG anticipates that San Ramon's 2010 population will be 58,700, and its 2020 population will be 70,900. Between 2000 and 2007, San Ramon has grown at an annual rate of 3.79 percent. Applying this growth rate to the City's 2007 population estimate of 58,035, the 2010 population is expected to be 64,887, which would exceed ABAG's 2010 projection of 58,700 by 10.5 percent. With the addition of population growth induced by the proposed project, the City's 2010 population is

estimated to be 67,969 persons and would exceed the ABAG projections by 15.8 percent. This is a significant growth-inducing impact because the proposed project would exceed regional population projections. No mitigation is available to reduce this impact to a level of less than significant; therefore, growth inducement beyond the ABAG regional forecast is a significant unavoidable impact of the proposed project.

The project site is currently served by infrastructure and the proposed project would not require the extension of roadways or utility systems into unserved areas; therefore, the proposed project would not remove a barrier to growth through the extension of urban infrastructure.

Because of its size and intensity, as well as its destination potential, the proposed project may be a catalyst for future unrelated projects. This may include new development projects or redevelopment of existing properties. Note that no such projects have been identified at the time of this writing, and it would be speculative to identify any potential locations or types of projects.

6.3 - Cumulative Impacts

6.3.1 - Background

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an EIR when a project's incremental effect is cumulatively considerable. Cumulatively considerable means that "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow one of two options:

1. The "list approach" - a list of past, present, and reasonably foreseeable future projects, producing related or cumulative impacts, including those that are outside the control of the lead agency; or
2. The "summary of projections" method - a summary of projections contained in an adopted General Plan or related planning document, which is designed to evaluate regional or area-wide conditions.

In accordance with CEQA Guidelines Section 15130(b), "the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects that do not contribute to the cumulative impact.

6.3.2 - Previously Certified Environmental Documents

Below is a summary of the cumulative impact conclusions from the previously certified City of San Ramon General Plan EIR and the City Civic Center EIR.

City of San Ramon General Plan EIR

The City of San Ramon General Plan EIR identified the increase in potable water demand from General Plan buildout as a cumulatively considerable impact. While the local water agencies indicated that they had enough existing and planned water supplies to accommodate the potable water needs of General Plan buildout, the General Plan EIR concluded that the additional demand would be cumulatively considerable. All other impacts resulting from General Plan buildout were found not to be cumulatively considerable.

City Civic Center EIR

The City Civic Center EIR identified the increases in ambient noise levels at Camino Ramon and Executive Parkway as a cumulatively considerable impact of the project. Although the City Civic Center would contribute only a 0.2-dBA increase to this intersection, other cumulative projects would add 2.9 dBA, and the combined total would exceed the 3.0 dBA significance threshold. All other impacts resulting from the City Civic Center project were found not to be cumulatively considerable.

6.3.3 - Geographic Scope

Table 6-1 below lists the geographic scope, or study area, considered in this cumulative analysis by resource, per CEQA Guidelines Section 15130 (b).

Table 6-1: Geographic Scope of Cumulative Analysis by Resource

Resource	Cumulative Analysis Study Area
Aesthetics, Light, and Glare	City of San Ramon
Air Quality	San Francisco Bay Area Air Basin
Biological Resources	Bishop Ranch subarea
Cultural Resources	Bishop Ranch subarea
Geology, Soils, and Seismicity	Bishop Ranch subarea
Hazards and Hazardous Materials	Bishop Ranch subarea
Hydrology and Water Quality	Bishop Ranch subarea
Land Use	City of San Ramon
Noise	Project Area Ambient Noise Environment
Population and Housing	San Francisco Bay Area Region
Public Services and Recreation	City of San Ramon
Transportation	City of San Ramon
Urban Decay	Cities of San Ramon and Dublin, Town of Danville

Table 6-1 (Cont.): Geographic Scope of Cumulative Analysis by Resource

Resource	Cumulative Analysis Study Area
Utility Systems	East Bay Municipal Utility service area (potable water), Central Contra Costa Sanitary District (wastewater); South San Ramon Creek watershed (drainage); San Francisco Bay Area region (solid waste); Pacific Gas and Electric service area (energy)
Source: Michael Brandman Associates, 2007.	

6.3.4 - Cumulative Impact Analysis

Aesthetics, Light, and Glare

The analysis area for evaluation of cumulative impacts on aesthetics, light, and glare is the City of San Ramon. The city is characterized as a suburban community located within the San Ramon Valley. The valley bottom is mostly developed with urban uses, while significant portions of the hillsides and nearly all of the ridgelines have remained undeveloped. Mt. Diablo, Wiedemann Hill, and the Dougherty Hills are prominent visual features. I-680 is designated as a State Scenic Highway through San Ramon.

The proposed project, in conjunction with development contemplated by the City of San Ramon General Plan, would result in changes to views of scenic vistas, views from I-680, visual character, and light and glare. However, the incremental changes that would occur relative to the baseline conditions would not be cumulatively considerable, because of the extent and nature of existing development in San Ramon. Moreover, planned development would be required to comply with development guidelines and would be reviewed by the City to ensure consistency with architectural standards, viewshed policies, and lighting requirements. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on aesthetics, light, and glare.

Air Quality

The analysis area for evaluation of cumulative impacts to air quality includes the San Francisco Bay Area Air Basin (Air Basin), which is identical to the boundaries of the San Francisco Bay Area Air Quality Management District. The Air Basin consists of Napa, Marin, San Francisco, Contra Costa, Alameda, San Mateo, and Santa Clara counties; the southern portion of Sonoma County; and the western portion of Solano County.

Cumulative impact analysis is guided by buildout assumptions identified in regional population projections for the Air Basin. BAAQMD, which oversees air quality in the Air Basin, uses the ABAG population growth projections as the basis for its projections for air pollution reduction strategies contained in its Clean Air Plan. As discussed in Section 6.2, Growth Inducement, the proposed project and other planned growth in San Ramon would contribute to population growth above ABAG projections for San Ramon and, therefore, would be inconsistent with the projections

contained in the Clean Air Plan and would have a cumulatively considerable impact associated with inconsistency with regional air quality planning. In addition, as discussed in Section 4.2, Air Quality, the proposed project would result in project-level emissions that exceed BAAQMD daily thresholds for criteria pollutants during construction and operations. BAAQMD considers any project that exceeds daily thresholds to have a cumulatively considerable impact on regional air quality. Finally, the proposed project is an intensive, large-scale urban development project that would result in a net increase in greenhouse gas emissions. Given its size and intensity, the proposed project's direct and indirect emissions would have a cumulatively considerable contribution to greenhouse gas concentrations in the atmosphere.

Biological Resources

The analysis area for evaluation of cumulative impacts to biological resources includes the Bishop Ranch subarea, identified in the San Ramon General Plan. Of the four parcels in the proposed project, one is completely undeveloped, another is partially developed, and the other two are fully developed with parking areas and an office building.

The Bishop Ranch subarea is mostly built out and is considered an urban environment. The burrowing owl and nesting birds protected by the Migratory Bird Treaty Act (MTBA) are the only two special-status species with the potential to occupy this area. Development activities associated with the proposed project, as well as other future development projects in the subarea, may impact these special-status species. Standard pre-construction surveys and, if necessary, avoidance or relocation procedures would be required for any project with the potential to affect these special-status species. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on biological resources. Because of the urban, built-up nature of Bishop Ranch, there is no potential for any other significant individual or cumulative biological resource impacts.

Cultural Resources

The analysis area for evaluation of cumulative impacts to cultural resources includes the Bishop Ranch subarea, identified in the San Ramon General Plan. Of the four parcels in the proposed project, one is completely undeveloped, another is partially developed, and the other two are fully developed with parking areas and an office building.

The Bishop Ranch subarea is mostly built out and is considered an urban environment. Nearly all of the land within the subarea has been previously graded and developed or substantially disturbed. In addition, there are no known cultural resources within the subarea. Development activities associated with the proposed project, as well as other future development projects in the subarea, would result in ground-disturbing activities that may encounter previously undiscovered cultural resources. Standard construction monitoring and, if necessary, avoidance or recovery procedures would be required for any project with the potential to adversely affect cultural resources. Therefore, the proposed project,

in conjunction with other future development projects, would not have cumulatively considerable impacts on cultural resources.

Geology, Soils, and Seismicity

The analysis area for evaluation of cumulative impacts to geology, soils, and seismicity includes the Bishop Ranch subarea, identified in the San Ramon General Plan. Of the four parcels in the proposed project, one is completely undeveloped, another is partially developed, and the other two are fully developed with parking areas and an office building.

The Bishop Ranch subarea is mostly built out and is considered an urban environment. Nearly all of the land within the subarea has been previously graded and developed or substantially disturbed. There are no known geologic hazards within the subarea (active faults, liquefaction zones, steep slopes, etc.). Development activities associated with the proposed project, as well as other future development projects in the subarea, would be required to comply with building code standards for foundations and structures to ensure that buildings are adequately supported to withstand seismic events and abate any unstable soil conditions. In addition, future development would be required to implement standard erosion control measures to ensure that ground-disturbing activities do not create offsite hazards. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on geology, soils, and seismicity.

Hazards and Hazardous Materials

The analysis area for evaluation of cumulative impacts to hazards and hazardous materials includes the Bishop Ranch subarea. The subarea is mostly built out and contains office buildings. There are several existing users of hazardous materials within the subarea; however, there are no known contaminated sites within the subarea, and the area has low potential for toxic exposure. The PG&E research tap (electric sub-transmission line) runs adjacent to the east side of the subarea along the Iron Horse Trail, but there is no definitive evidence indicating that exposure to electromagnetic fields constitutes a substantial health hazard. The proposed project, as well as future development projects, would be required to comply with all applicable hazardous materials handling and storage requirements to ensure that public health and safety are not at risk. Development activities associated with the proposed project, as well as other future development projects in the subarea, may result in diesel particulate matter (DPM) emissions during construction and operation. For DPM emissions to be considered a significant health hazard, sustained exposure to them over several decades are required. Construction and operational activities associated with future development in the subarea would not have the potential to create sustained exposure to DPM. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on hazards and hazardous materials.

Hydrology and Water Quality

The analysis area for evaluation of cumulative impacts to hydrology and water quality includes the Bishop Ranch subarea, identified in the San Ramon General Plan. Of the four parcels in the proposed

project, one is completely undeveloped, another is partially developed, and the other two are fully developed with parking areas and an office building.

The South San Ramon Creek watershed in San Ramon is mostly built out and is considered an urban environment. Nearly all of the land within the watershed has been previously graded and developed or substantially disturbed. Existing urban drainage infrastructure exists in the San Ramon portion of the watershed that adequately conveys flows to South San Ramon Creek and downstream waterways. Development activities associated with the proposed project, as well as other future development projects in the subarea, would increase impervious surface coverage and create the potential for additional runoff volumes to enter South San Ramon Creek. To reduce the potential for adverse water quality and downstream flooding impacts, future development projects would be required to provide drainage impoundment and water quality treatment facilities that would detain runoff and treat it prior to discharge into the creek. This would ensure that the proposed project, in conjunction with future development projects, would not create cumulatively considerable downstream water quality and flooding impacts. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on hydrology and water quality.

Land Use

The analysis area for evaluation of cumulative impacts on land use in the City of San Ramon. Most of the City contains urban development, with more than 23,000 dwelling units and 16 million square feet of non-residential square footage. The General Plan contemplates 4,065 additional dwelling units and close to 2.3 million square feet of non-residential development above existing and approved/underway/programmed development. The addition of this residential and non-residential development potential translates to 14 percent increase over existing and approved/underway/programmed development. The proposed project, in conjunction with future development contemplated by the General Plan, is inherently consistent with the development projections contained in the General Plan. Future development projects would be required to demonstrate consistency with General Plan policies and Zoning Ordinance policies and ensure that they do not create land use conflicts with adjacent properties. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on land use.

Noise

The analysis area for evaluation of cumulative noise impacts encompasses the ambient noise environment around the project site, which includes the Bishop Ranch Business Park, Central Park, the Market Place, the Reflections Condominiums, and the residential neighborhood south of Bishop Ranch 1, as well as roadways that would experience increases in traffic volumes from project-generated trips.

The cumulative noise impact analysis is guided by evaluating increases in ambient noise levels in the project vicinity relative to existing conditions. Construction noise would result in temporary increases in ambient noise levels, and mitigation is proposed that would require implementation of noise control measures during construction activities. Because construction would be temporary, ambient noise levels would not experience a permanent increase and, therefore, no cumulatively considerable increase would occur. The proposed project would result in construction and operational vibration. Vibration during both construction and operational activities would not exceed significance thresholds at the nearest land uses (the Marriot Residence Inn and the Reflections Condominiums) and, therefore, would not be cumulatively considerable. Project residential units may be exposed to substantial vibration from vehicular activities in adjacent parking garages. Mitigation is proposed that would require a vibration analysis to be performed to determine if significant impacts would occur, and identify vibration attenuation measures to reduce impacts to a level of less than significant. Therefore, project residents would not be exposed to significant sources of vibration, and impacts would not be cumulatively considerable. Vehicular trips generated by the proposed project would not cause ambient noise levels along any affected roadway segments to exceed acceptable noise standards under near-term or Year 2020 conditions. Therefore, the proposed project would not have a cumulatively considerable impact related to increased ambient noise levels on nearby roadways. Onsite noise associated with the proposed project would not result in ambient noise levels increasing to unacceptable levels at any surrounding land uses. Therefore, the proposed project would not have a cumulatively considerable impact related to increased ambient noise levels at surrounding land uses. Onsite noise associated with the proposed project may expose project residents to unacceptable levels. Mitigation is proposed that would require the installation of various structural noise attenuation measures to ensure that interior residential noise levels are within acceptable standards to reduce impacts to a level of less than significant. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts to noise.

Population and Housing

The analysis area for evaluation of cumulative impacts to population and housing encompasses the nine-county San Francisco Bay Area region. As described in Section 6.2, Growth Inducement, the proposed project, in conjunction with other future development in San Ramon, would be consistent with the population projections contained in the General Plan, but the proposed project would be inconsistent with the projections contained in ABAG's 2005 Projections. The proposed project and other future development projects in San Ramon would exceed ABAG projections by approximately 9,000 residents, or 15.8 percent. This is considered a significant growth-inducement impact at a regional level because ABAG population projections are the basis for regional strategies for air quality, affordable housing, transportation planning, and other activities. Therefore, the proposed project, in conjunction with other future development projects, would have cumulatively considerable impacts on population and housing.

Public Services and Recreation

The analysis area for evaluation of cumulative impacts to public services and recreation is the City of San Ramon. The proposed project and future development projects would increase demands for fire protection, police protection, schools, libraries, parks, trails, and other recreational facilities. These projects would be required to provide development fees to finance capital improvements to the facilities to maintain acceptable service ratios and performance standards. The proposed project would provide new, larger, state-of-the-art facilities for the San Ramon Police Department and the library. These facilities would be sized to accommodate increased demands made on each public service provider from planned growth and, therefore, would be a cumulative benefit of the proposed project. Future development would also be conditioned to provide adequate fire suppression technology. If applicable, future development projects may also be required to dedicate parkland or provide in-lieu-of fees to mitigate for impacts on parks and recreational facilities. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on public services and recreation.

Transportation

The analysis area for evaluation of cumulative impacts to transportation is the City of San Ramon. The proposed project, in conjunction with other development projects contemplated by the City of San Ramon General Plan, would increase traffic volumes at intersections within the City limits under Existing Plus Project (Year 2010) and Year 2020 conditions. With the addition of the cumulative trips generated by the proposed project and future development, several intersections would operate at deficient levels of service. Mitigation is proposed that would require improvements to intersections resulting in acceptable performance levels under Existing Plus Project and Year 2020 conditions. Therefore, cumulative impacts on intersection operations would not be considerable.

Cumulative trips generated by the proposed project and future development could contribute to existing deficient freeway mainline and ramp performance on I-680. No mitigation is available to mitigate the proposed project's contribution to a level of less than significant, and, therefore, the proposed project and other planned development projects could have a cumulatively considerable impact on freeway operations under Existing Plus Project and Year 2020 conditions.

The proposed project would result in deficient queuing operations. Mitigation is proposed that would require intersection improvements, resulting in queuing operations at acceptable levels. Therefore, cumulative impacts on queuing would not be considerable.

The proposed project would result in alterations to the street network around the project site, including narrowing Camino Ramon to two-lanes to allow on-street parking during non-commute hours. This has the potential to create roadway hazard impacts associated with the on-street parking and mitigation is proposed that would require monitoring of the roadway and, if necessary, the implementation of corrective measures to ensure that traffic hazards are not created. Therefore, cumulative impacts associated with roadway hazards would not be considerable.

The proposed project and other future development projects would be required to provide adequate off-street parking and, therefore, would ensure that cumulative impacts associated with parking would not be considerable.

The proposed project and other future development projects would be required to provide appropriate transit, bicycle, and pedestrian facilities and, therefore, would ensure that cumulative impacts associated with alternative transportation would not be considerable.

Urban Decay

The analysis area for evaluation of cumulative impacts to urban decay includes the Trade Area for the project, which comprises San Ramon, Dublin, and Danville. The potential for urban decay occurs when existing retail businesses experience lost sales revenues of 10 percent or more for 4 consecutive years. As described in Section 4.13, Urban Decay, the development of the proposed project and other planned retail projects in the Trade Area are expected to result in lost businesses at existing retail establishments averaging 7.4 percent between 2010 and 2013; however, because of household and income growth, there would be a net increase in sales at existing businesses afterwards. This would not meet the 10-percent threshold for four or more years and, therefore, would not create the potential for urban decay in the Trade Area. Moreover, vacancy rates in the Trade Area are approximately 3 percent, indicating that vacant retail storefronts are likely to be re-tenanted relatively quickly. As such, it is highly unlikely the proposed project, in conjunction with other planned retail projects, would create urban decay conditions in the Trade Area. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on urban decay.

Utility Systems

The proposed projects cumulative impacts to utility systems are discussed separately below.

Potable Water

Potable water demand from the proposed project, in conjunction with other planned growth in the East Bay Municipal Utility District service area, is accounted for in the agency's 2005 Urban Water Management Plan. As indicated in the Urban Water Management Plan, the agency has adequate existing and planned water supplies to satisfy projected demand, even during drought-year scenarios, through 2030. In addition, the proposed project and future projects would be required to implement water-efficiency measures to reduce the demand for potable water. In addition, the proposed project and some future development projects would be served by recycled water systems for outdoor irrigation, which would further reduce the demand for potable water. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on potable water.

Wastewater

Wastewater generation by the proposed project, as well as with other planned growth in the Central Contra Costa Sanitary District service area, is factored into the agency's long-range planning projections. The agency indicates that its treatment plant's average daily flow is approximately 72 percent of capacity and has available treatment capacity to serve the proposed project and other planned projects. In addition, the agency is undertaking capital improvements to its conveyance system, including upsizing the San Ramon Interceptor in anticipation of planned growth in the San Ramon area. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on wastewater.

Storm Drainage

The proposed project, in conjunction with planned growth in the South San Ramon Creek watershed, would create the potential for additional runoff volumes to enter the creek. Future development projects would be required provide drainage impoundment facilities that would detain runoff prior to discharge into the creek. The proposed project would provide onsite drainage facilities such as green roofs and bioswales and the re-routing of an existing storm drain line so that it can accept drainage from the project. This would ensure that the proposed project, in conjunction with future development projects, would not create cumulatively considerable downstream drainage impacts. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on storm drainage.

Solid Waste

The proposed project and future development projects would generate construction and operational solid waste that would need to be disposed of in landfills in the San Francisco Bay Area region. Landfill capacity in the region is available to serve the proposed project, as well as other planned projects, through 2025. In addition, the proposed project and other future development projects would be required to implement waste diversion measures, including recycling, to reduce waste generation. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on solid waste.

Energy

The proposed project, in conjunction with future development in the PG&E service area, would increase demand for electricity and natural gas. PG&E has adequate existing energy supplies to meet existing demand and has access to other energy supplies necessary to meet future demand. In addition, the proposed project and future projects would be required to implement energy-efficient measures in accordance with the 2005 Title 24 standards to reduce energy demand. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on energy.

6.4 - Energy Conservation

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines. Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below, this EIR concludes that the proposed project will not result in the wasteful, inefficient, and unnecessary consumption of energy, will not cause the need for additional natural gas or electrical-energy producing facilities, and, therefore, will not create a significant impact on energy resources.

6.4.1 - Regulatory Setting

Federal and State agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. As set forth above, the CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. Some of the more relevant federal and State energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway

Traffic and Safety Administration, which is part of the United States Department of Transportation, is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; rather, compliance is determined on the basis of each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. The Corporate Average Fuel Economy (CAFE) program, which is administered by United States Environmental Protection Agency, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The United States Environmental Protection Agency calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the United States Department of Transportation is authorized to assess penalties for noncompliance. In the course of its over thirty-year history, this regulatory program has resulted in vastly improved fuel economy throughout the nation's vehicle fleet.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) such as ABAG were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, State, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators, and encouraging urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California residential and nonresidential consumers have reduced their utility bills by at least \$15.8 billion. The CEC further estimates that by 2011, residential and nonresidential consumers will save an additional \$43 billion in energy costs.

In 2005, the CEC adopted new energy efficiency standards. All projects that apply for a building permit on or after October 2005 must adhere to the new 2005 standards. A copy of the 2005 Energy Efficiency Standards may be reviewed online at www.energy.ca.gov/title24/2005standards/index/html. The 2005 Energy Efficiency Standards may also be reviewed at the Energy Efficiency Division, California Energy Commission, 1516 Ninth Street, MS-29, Sacramento, CA 95814-5512.

Because the adoption of Title 24 post-dates the adoption of AB 1575, it has generally been the practice throughout the State that compliance with Title 24 (as well as compliance with the federal and State regulations discussed above) ensures that projects will not result in the inefficient, wasteful, and unnecessary consumption of energy. As is the case with other uniform building codes, Title 24 is designed to provide certainty and uniformity throughout the State while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Large infrastructure transportation projects that cannot adhere to Title 24 design-build performance standards may, depending on the circumstances, undertake a more involved assessment of energy conservation measures in accordance with some of the factors set forth in Appendix F of the CEQA Guidelines. As an example, pursuant to the California Department of Transportation CEQA implementation procedures and FHWA Technical Advisory 6640.8A, a detailed energy study is generally only required for large-scale infrastructure projects. However, for the vast majority of residential and nonresidential projects, adherence to Title 24 is deemed necessary to ensure that no significant impacts occur with respect to the inefficient, wasteful, and unnecessary consumption of energy. As a further example, the adoption of federal vehicle fuel standards, which have been continually improved since their original adoption in 1975, have also protected against the inefficient, wasteful, and unnecessary use of energy.

According to the CEC, reducing energy use has been a benefit to all. Building owners save money, Californians have a more secure and healthy economy, the environment is less negatively impacted, and our electrical system can operate in a more stable state. The 2005 Standards (for residential and nonresidential buildings) are expected to reduce the growth in electricity use by 479 gigawatt-hours per year (GWh/y) and reduce the growth in natural gas use by 8.9 million therms per year (therms/y). The savings attributable to new nonresidential buildings are 143 GWh/y of electricity savings and 0.5 million therms. Additional savings result from the application of the Standards on building alterations. In particular, requirements for cool roofs, lighting, and air distribution ducts are expected to save about 175 GWh/y of electricity. These savings are cumulative, doubling in two years, tripling in three, etc. Table 6-2 provides a summary of the electricity savings envisioned by the 2005 standards.

Table 6-2: Electricity Savings Projected From the 2005 Standards

Category	2001 Standard (GWh)	2005 Standard (GWh)	Savings (GWh)	Percent Reduction
Lighting	861.6	777.5	84.1	9.8
Heating	38.8	36.9	1.9	4.9
Cooling	537.5	501.5	35.9	6.7
Fans	424.7	403.6	21.1	5.0
Total	1,862.6	1,719.5	143.0	7.7
GWh = Gigawatt hours Source: California Energy Commission, 2005.				

Since the California 2000/2001 electricity crisis, the CEC has placed more and more emphasis on demand reductions. Changes in 2001 (following the electricity crisis) reduced electricity demand (for newly constructed residential and nonresidential buildings) by about 110.3 megawatts (MW) each year. Newly constructed nonresidential buildings account for 44 MW of these savings. Like energy savings, demand savings accumulate each year. The 2005 Standards are expected to reduce electric demand by another 180 MW each year. Table 6-3 provides a summary of the demand savings envisioned by the 2005 standards.

Table 6-3: Demand Savings Projected From the 2005 Standards

Category	2001 Standard (MW)	2005 Standard (MW)	Savings (MW)	Percent Reduction
Lighting	157.9	142.6	15.3	9.7
Heating	3.6	3.5	0.1	2.2
Cooling	276.7	253.1	23.6	8.5
Fans	79.7	74.6	5.0	6.3

Table 6-3 (Cont.): Demand Savings Projected From the 2005 Standards

Category	2001 Standard (MW)	2005 Standard (MW)	Savings (MW)	Percent Reduction
Total	517.9	473.9	44.0	8.5
Notes: MW = Megawatts Source: California Energy Commission, 2005.				

In many parts of the world, the wasteful and poorly-managed use of energy has led to oil spills, acid rain, smog, and other forms of environmental pollution that have ruined the natural beauty people seek to enjoy. California is not immune to these problems, but the CEC-adopted appliance standards, building standards, and utility programs that promote efficiency and conservation have gone a long way toward maintaining and improving environmental quality. Other benefits include reduced destruction of natural habitats, which, in turn, helps protect wildlife, plants, and natural systems.

Many experts believe that burning fossil fuel is a major contributor to global warming; carbon dioxide is being added to an atmosphere already containing 25 percent more than it did two centuries ago. Carbon dioxide and other greenhouse gases create an insulating layer around the Earth that leads to global climate change. CEC research shows that most of the sectors of the State economy face significant risk from climate change, including agriculture, forests, and the natural habitats of a number of indigenous plants and animals.

Scientists recommend that actions be taken to reduce emissions of carbon dioxide and other greenhouse gases. While adding scrubbers to power plants and catalytic converters to cars are steps in the right direction (both of which are currently enforced as part of existing regulatory schemes), the use of energy-efficient standards can be effective actions to limit the carbon dioxide that is emitted into the atmosphere. According to the CEC, using energy efficiently, in accordance with Title 24 Energy Efficiency standards, is a proven, far-reaching strategy that can and does present an important contribution to the significant reduction of greenhouse gases.

In fact, the National Academy of Sciences has urged the country to follow California's lead on such efforts, and has recommended that nationwide energy efficiency building codes modeled after Title 24 be adopted. The CEC's Title 24 program has played a vital, if not the most important, role in maximizing energy efficiency and preventing the wasteful, inefficient, and unnecessary use of energy throughout the State.

The CEC's 2005 Energy Efficiency Standards include the following:

- Time Dependent Valuation (TDV). Source energy was replaced with TDV energy. TDV energy values energy savings greater during periods of likely peak demand, such as hot summer weekday afternoons, and values energy savings less during off-peak periods. TDV

gives more credit to measures such as daylighting and thermal energy storage that are more effective during peak periods.

- **New Federal Standards.** Coincident with the 2005 Standards, new standards for water heaters and air conditioners took effect. These changes affect all residential buildings, but also affect many nonresidential buildings that use water heaters and/or residential-size air conditioners.
- **New Lighting in Historic Buildings.** The exception to the Standards requirements for historic buildings has changed for lighting requirements so that only those historic or historic replica components are exempt.
- **Cool Roofs.** The nonresidential prescriptive standards require cool roofs—high-reflectance, high-emittance roof surfaces or exceptionally high-reflectance and low-emittance surfaces—in all low-slope applications. The cool-roof requirements also apply to roof replacements for existing buildings.
- **Acceptance Requirements.** Basic “building commissioning,” at least on a component basis, is required for electrical and mechanical equipment that is prone to improper installation.
- **Demand Control Ventilation.** Controls that measure CO₂ concentrations and vary outside air ventilation are required for spaces such as conference rooms, dining rooms, lounges, and gyms.
- **T-bar Ceilings.** Placing insulation directly over suspended ceilings is not permitted as a means of compliance, except for limited applications.
- **Relocatable Public School Buildings.** Special compliance approaches are added for relocatables so they can be moved anywhere statewide.
- **Duct Efficiency.** R-8 duct insulation and duct sealing with field verification is required for ducts in unconditioned spaces in new buildings. Duct sealing is also required in existing buildings when the air conditioner is replaced. Performance methods may be used to substitute a high-efficiency air conditioner in lieu of duct sealing.
- **Indoor Lighting.** The lighting power limits for indoor lighting are reduced in response to advances in lighting technology.
- **S Skylights for Daylighting in Buildings.** The prescriptive standards require that skylights with controls to shut off the electric lights are required for the top story of large, open spaces (spaces larger than 25,000 feet with ceilings higher than 15 feet).
- **Thermal Breaks for Metal Building Roofs.** Continuous insulation or thermal blocks at the supports are required for metal building roofs.
- **Efficient Space Conditioning Systems.** A number of measures are required that improve the efficiency of heating, ventilation, and air conditioning (HVAC) systems, including variable-speed drives for fan and pump motors greater than 10 horsepower, electronically-commutated

motors for series fan boxes, improved controls, efficient cooling towers, and water-cooled chillers for large systems.

- **Unconditioned Buildings.** New lighting standards—lighting controls and power limits—apply to unconditioned buildings, including warehouses and parking garages. Lighting power tradeoffs are not permitted between conditioned and unconditioned spaces.
- **Compliance Credits.** Procedures are added for gas cooling, underfloor ventilation.
- **Lighting Power Limits.** The Standards set limits on the power that can be used for outdoor lighting applications such as parking lots, driveways, pedestrian areas, sales canopies, and car lots. The limits vary by lighting zones or ambient lighting levels. Lighting power tradeoffs are not permitted between outdoor lighting and indoor lighting.
- **Shielding.** Luminaires in hardscape areas larger than 175 watts are required to be cutoff luminaires, which will save energy by reducing glare.
- **Bi-level Controls.** In some areas, outdoor lighting controls are required, including the capability to reduce lighting levels to 50 percent.
- **Lighting Power Limits.** Lighting power limits (or alternative equipment efficiency requirements) apply to externally and internally illuminated signs used either indoors or outdoors.

Pursuant to the California Building Standards Code and the Title 24 Energy Efficiency Standards, the City will review the design and construction components of the project's Title 24 compliance when specific building plans are submitted.

6.4.2 - Energy Requirements of the Proposed Project

Short-term construction and long-term operational energy consumption are discussed below.

Short-Term Construction

The United States Environmental Protection Agency (EPA) regulates nonroad diesel engines. The EPA has no formal fuel economy standards for nonroad (e.g., construction) diesel engines but does regulate diesel emissions, which indirectly affects fuel economy. In 1994, EPA adopted the first set of emission standards ("Tier 1") for all new nonroad diesel engines greater than 37 kilowatts (50 horsepower). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing NO_x emissions from these engines by 30 percent. EPA has since adopted more stringent emission standards for NO_x, hydrocarbons, and particulate matter from new nonroad diesel engines. This program includes the first set of standards for nonroad diesel engines less than 37 kW. It also phases in more stringent "Tier 2" emission standards from 2001 to 2006 for all engine sizes and adds yet more stringent "Tier 3" standards for engines between 37 and 560 kW (50 and 750 hp) from 2006 to 2008. These standards will further reduce nonroad diesel engine emissions by 60 percent for NO_x and 40 percent for PM from Tier 1 emission levels. In 2004, EPA issued the Clean Air Nonroad

Diesel Rule. This rule will cut emissions from nonroad diesel engines by more than 90 percent, and it will take effect beginning in 2008 and will be fully phased in by 2014. These emission standards are intended to promote advanced clean technologies for nonroad diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The first phase of project construction is scheduled to begin in mid-2008 and the last phase would be completed in mid-2011. Table 6-4 provides an estimate of construction fuel consumption during the grading and paving phases. These two phases are the most energy-intensive aspects of construction and are the phases that were modeled as part of the short-term air quality analysis contained in Section 4.2, Air Quality. The assumptions contained in the table below are the same assumptions used in the short-term air quality analysis.

Table 6-4: Construction Fuel Consumption

Project Component	Fuel Consumption (gallons)
Plaza District	60,005
Bishop Ranch 1A	57,724
City Hall and Transit Center	6,143
Total	123,872
Construction fleet assumptions and vehicle miles traveled provided by URBEMIS Air Quality Modeling output. Source: Michael Brandman Associates, 2007.	

As shown in Table 6-4, project construction would be estimated to consume approximately 123,872 gallons of diesel fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Long-Term Operations

Transportation Energy Demand

Vehicle fuel efficiency is regulated at the federal level. Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. As discussed above, since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model: rather, compliance is determined on the basis of each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States.

Trip generation rates provided in the Traffic Operations Evaluation prepared by DMJM Harris were used to estimate vehicular fuel consumption associated with trips to and from the proposed project. Table 6-5 provides an estimate of the daily fuel consumed by vehicles traveling to and from the proposed project. These estimates were derived using the same assumptions used in the long-term vehicular air quality analysis in Section 4.2, Air Quality.

Table 6-5: Operations Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Daily Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)	Total Daily Fuel Consumption (gallons)
Passenger cars	54.7	132,128	21.6	6,117
Light trucks	31.4	75,845	17.2	4,410
Heavy trucks/ Other	12.3	29,710	6.1	2,415
Motorcycles	1.6	3,865	50.0	77
Total	100.0	241,548		13,019

Notes:
 Daily trips and vehicle miles traveled provided by URBEMIS Air Quality Modeling output.
 Average fuel economy provided by the United States Department of Transportation, Bureau of Transportation Statistics.
 "Other" consists of urban buses, school buses, and motorhomes.
 Source: Michael Brandman Associates, 2007.

As indicated in the Urban Decay Analysis prepared for the proposed project by Economic and Planning Systems, the proposed project would primarily cater to customers living in San Ramon, Danville, and Dublin area, although it may also attract customers from Pleasanton, Livermore, Alamo, and Walnut Creek. While the proposed project would have a regional appeal and may create longer than average trip lengths, it does incorporate a number of trip reduction design features. These trip reduction measures are listed below.

Trip Reduction Design Features

- Inclusion of a Transit Center that would be served by County Connection bus service, which would provide service to local communities and the Dublin/Pleasanton and Walnut Creek BART stations.
- Creation of a pedestrian-oriented environment in the Plaza District by limiting parking to on-street spaces and parking structures; no off-street parking would be provided in front of Plaza District buildings, thereby enhancing pedestrian safety and mobility.
- Development of high-density residential uses in the Plaza District within walking or biking distance of employment centers (Bishop Ranch Business Park), commercial retail centers (Plaza District retail, The Shops at Bishop Ranch, The Market Place), and public facilities (City Hall, Transit Center, Library, Central Park, and San Ramon Community Center).

Other CEQA Considerations

- Creation of direct “as the crow flies” pedestrian and bicycle connections to the Iron Horse Trail from the Plaza District and Bishop Ranch 1A.
- Creation of pedestrian connections to surrounding land uses, including The Shops at Bishop Ranch, Bishop Ranch 1, Bishop Ranch 3, Chevron Park, and the AT&T campus.
- Extension of Bishop Drive Class II bicycle facilities from Sunset Drive to Bollinger Canyon Road.
- Creation of Class II bicycle parking in parking structures.

Building Energy Demand

The proposed project is estimated to demand 34 million kWh of electricity and 26 million kBtus of natural gas on an annual basis. These figures were derived from energy consumption rates provided by the CEC. Refer to Impact US-5 in Section 4.14, Utility Systems for further discussion of the calculations used to arrive at these consumption estimates.

PG&E provided a “will-serve” letter dated May 17, 2007 indicating that the electrical and natural gas loads of the proposed project are within the parameters of project load growth and, therefore, would be able to be served with electricity and natural gas. The letter is provided in Appendix H.

Nonetheless, the proposed project can promote building energy efficiency through compliance with energy efficiency standards and the provision of energy efficiency measures that exceed required standards. These energy conservation measures are listed below.

Energy Conservation Design Measures

- Extensive use of glass windows in all project components, particularly in upper floors, to promote natural day lighting of interior areas to reduce the need for lighting.
- Automated occupancy sensors in structures that automatically shut off lights when rooms are unoccupied.
- Participation in PG&E energy efficiency rebate programs (e.g., air conditioning, gas heating, refrigeration, and lighting).
- High-efficiency clothes washers and dishwashing machines.
- Re-circulating hot water systems to reduce the need to heat water.
- Green roofs that capture stormwater runoff during the rainy season and keep building interiors cool during warmer months.

SECTION 7: EFFECTS FOUND NOT TO BE SIGNIFICANT

7.1 - Introduction

This section is based on the Initial Study-Notice of Preparation (IS-NOP), dated April 4, 2007, contained in Appendix A of this Draft Subsequent Environmental Impact Report (DSEIR). The IS-NOP was prepared to identify the potentially significant effects of the proposed project and was circulated for public review between April 4 and May 3, 2007. In the course of this evaluation, certain impacts were found to be less than significant because the proposed project's scope could not create such impacts. This section provides a brief description of effects found not to be significant or less than significant based on the IS-NOP comments or more detailed analysis conducted as part of the DSEIR preparation process. Note that a number of impacts that are found to be less than significant are addressed in the various DSEIR topical sections (Sections 4.1 through 4.14), to provide more comprehensive discussion of why impacts are less than significant in order to better inform decision makers and the public.

7.2 - Effects Found Not To Be Significant

7.2.1 - Agriculture Resources

Loss of Important Farmland

The project site does not contain any active farmland or agricultural operations and, therefore, is not eligible for an Important Farmland designation. This condition precludes the possibility of the proposed project converting Important Farmland to non-agricultural use. No impacts would occur.

Conflicts With Williamson Act Contracts or Agricultural Zoning

The project site does not contain agricultural uses and, therefore, is not eligible for a Williamson Act contract. Therefore, no conflicts with a Williamson Act contract would occur. The parcels that constitute the project site are zoned for commercial uses. Therefore, no conflicts with agricultural zoning would occur. No impacts would occur.

Conversion of Neighboring Farmland to Non-Agricultural Use

No farmland is present on any of the parcels surrounding the project site. This precludes the possibility of the proposed project contributing to the conversion of neighboring farmland to non-agricultural use. No impacts would occur.

7.2.2 - Biological Resources

Habitat Conservation Plans

The project site is not located within the boundaries of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. This condition precludes the possibility of adverse impacts resulting from implementation of the proposed project. Therefore, no impacts would occur.

7.2.3 - Geology, Soils, and Seismicity

Septic and Alternative Wastewater Disposal Systems

The proposed project would connect to the Central Contra Costa Sanitary District wastewater system. This condition precludes the use of septic or alternative wastewater systems. Therefore, no impacts would occur.

7.2.4 - Hazards and Hazardous Materials

Aviation Hazards

The nearest airport, Livermore Municipal Airport, is located approximately 9 miles from the project site. There are no private airstrips within the project vicinity. Therefore, the proposed project would not expose persons residing or working in the project area to hazards associated with public airports or private airstrips. No impacts would occur.

Wildland Fires

Figure 9-3 of the City of San Ramon General Plan indicates that the project site is not within in an area susceptible to wildland fires. As such, development of the proposed project would not expose persons or property to wildland fire hazards. Therefore, no impacts would occur.

7.2.5 - Hydrology and Water Quality

Groundwater

The City of San Ramon is served by the East Bay Municipal Utility District, which obtains its supply primarily from the Mokelumne River Basin in the Sierra Nevada range and not from groundwater sources in Contra Costa County. No wells would be drilled as part of the proposed project. The project site does not contain any groundwater recharge basins and is not identified as a prime groundwater recharge area. Therefore, no impacts would occur.

100-Year Flood Hazards

Flood Insurance Rate Maps 0607100001B and 0600250475C indicate that the project site is not within a 100-year flood hazard area. As such, the proposed project would not expose persons or structures to 100-year flood hazards. Therefore, no impacts would occur.

Levee or Dam Failure

The project site is not downstream of any levees or dams. This condition precludes the possibility of the project site being inundated by flooding from levee or dam failure. Therefore, no impacts would occur.

Seiche, Tsunami, or Mudflow Hazards

The project site does not contain nor is located near any large inland bodies of water that may be susceptible to a seiche. The project site is located more than 30 miles from the Pacific Ocean and, therefore, is not prone to tsunami hazards. There are no active volcanoes or other volcanic features

with several hundred miles of San Ramon and, therefore, the project site would not be subject to mudflow inundation. Therefore, no impacts would occur.

7.2.6 - Land Use

Habitat Conservation Plans

The project site is not located within the boundaries of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. This condition precludes the possibility of adverse impacts resulting from implementation of the proposed project. Therefore, no impacts would occur.

7.2.7 - Mineral Resources

Loss of Important Mineral Resources

No mineral extraction activities occur on the project site, nor are any known significant mineral deposits present on the project site. Therefore, no impacts would occur.

7.2.8 - Noise

Aviation Noise

The project site is not within the boundaries of an Airport Land Use Plan, nor is it within 2 miles of a public airport. The nearest airport, Livermore Municipal Airport, is located approximately 9 miles from the project site. This distance precludes the possibility of the proposed project exposing persons to excessive aviation noise levels. In addition, there are no private airstrips within the project vicinity. Therefore, no impacts would occur.

7.2.9 - Population and Housing

Displacement of Housing

There is no housing on the project site; therefore, no housing would be displaced, and no replacement housing would need to be constructed elsewhere. No impacts would occur.

Displacement of People

No people reside on the project site; therefore, no people would be displaced, and no replacement housing would need to be constructed elsewhere. Therefore, no impacts would occur.

7.2.10 - Transportation

Air Traffic Patterns

The nearest airport, Livermore Municipal Airport, is located approximately 9 miles from the project site. This distance precludes the possibility of the proposed project changing air traffic patterns or creating a hazard to aviation. No impacts would occur.

SECTION 8: PERSONS AND ORGANIZATIONS CONSULTED

8.1 - Public Agencies

8.1.1 - City of San Ramon

City Manager's Office

City Manager Herb Moniz

City Attorney's Office

City Attorney Byron Athan

Planning/Community Development Department

Director Phil Wong

Planning Manager Debbie Chamberlain

Transportation Manager Lisa Bobadilla

Senior Planner Lauren Barr

Police Department

Chief Scott Holder

Parks and Community Services Department

Director Jeff Eorio

Economic Development Department

Director Marc Fontes

Engineering Services Department

Director Joye Fukuda

Division Manager Maria Robinson

Senior Traffic Engineer Phil Agostini

Senior Engineer Brian Bornstein

Senior Engineer Robin Bartlett

Associate Engineer Chris Low

Public Services Department

Director Karen McNamara

Operations Division Manager Jeff Gault

Solid Waste and Recycling Manager David Krueger

8.1.2 - County of Contra Costa

Environmental Health Services

Environmental Health Specialist Joe Doser

Library

County Librarian..... Anne Cain
Deputy County Librarian/Public ServicesLaura O'Donoghue

Public Works Department

Associate Civil Engineer.....John Pulliam
Associate Civil Engineer, Flood Control Tim Jensen

8.1.3 - State of California

Department of Transportation, District 4

Deputy District Director, Transportation Planning and Local Assistance Lee Taubeneck
District Office Chief, Transit and Community Planning Jean Finney
District Branch Chief, Intergovernmental Review..... Timothy C. Sable
Senior Transportation Engineer Roland Au-Yeung
Senior Transportation EngineerBonnita Chow
Senior Community Planner..... Beth Thomas
Transportation Engineer.....Ravider Singh
Transportation Planner..... Christian Bushong

Office of Planning and Research, State Clearinghouse

Senior Planner..... Scott Morgan

8.1.4 - San Ramon Valley Fire Protection District

Deputy Fire Marshal Michael Mentink

8.1.5 - San Ramon Valley Unified School District

SuperintendentRobert P. Kessler
Senior Planning and Development Manager Tina Perault

8.1.6 - East Bay Municipal Utility District

Manager of Water Distribution Planning DivisionWilliam R. Kirkpatrick

8.1.7 - East Bay Regional Park District

Trail Development Program Manager Jim Townsend
Trail Development Deputy Program Manager..... Jamie Perkins

8.1.8 - Central Contra Costa Sanitary District

Engineering Assistant IIIRussell B. Leavitt, AICP

8.1.9 - Town of Danville

Transportation Director..... Tai J. Williams

8.2 - Private Parties and Organizations

Pacific Gas and Electric Company

EMF Program Manager Michael Herz
Project Manager Terry Mullings

Sierra Club, San Francisco Bay Chapter, Mt. Diablo Group

Chair Jim Blickenstaff

SECTION 9: LIST OF PREPARERS

9.1 - Lead Agency

9.1.1 - City of San Ramon

City Manager's Office

City Manager Herb Moniz

City Attorney's Office

City Attorney Byron Athan

Planning/Community Development Department

Director Phil Wong

Planning Manager Debbie Chamberlain

Transportation Manager Lisa Bobadilla

Senior Planner Lauren Barr

Police Department

Chief Scott Holder

Parks and Community Services Department

Director Jeff Eorio

Economic Development Department

Director Marc Fontes

Engineering Services Department

Director Joye Fukuda

Division Manager Maria Robinson

Senior Traffic Engineer Phil Agostini

Senior Engineer Brian Bornstein

Senior Engineer Robin Bartlett

Associate Engineer Chris Low

Public Services Department

Director Karen McNamara

Operations Division Manager Jeff Gault

Solid Waste and Recycling Manager David Krueger

9.2 - Lead Consultant

9.2.1 - Michael Brandman Associates

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Project Manager Grant Gruber

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Senior Environmental Planner	John Baas, Ph.D.
Senior Hydrologist	Dale Stanton, PE
Senior Project Archaeologist	Carrie Wills, RPA
Senior Geotechnical Reviewer	Tula Economou, PG
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9.3 - Technical Subconsultants

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Project Manager

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9.3.2 - Economic and Planning Systems

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Economist

Thomas Schwartz

9.3.3 - Focus 360

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9.3.4 - Gates & Associates

Senior Associate.....

Chuck Gardella

Associate

Alex Chan

9.3.5 - MACTEC Engineering and Consulting, Inc.

Senior Principal Engineer

Donald W. Quigley, Ph.D., GE

Senior Geologist.....

Wayne Miller, PE

9.3.6 - RBF Consulting

Vice President.....Jim Brezack, PE
Project Manager Gerry Parco
Assistant Engineer..... Jonathon P. Marshall

SECTION 10: REFERENCES

- Association of Bay Area Governments. 2005. Projections 2005.
- Association of Bay Area Governments. 2007. A Place to Call Home: Housing in the San Francisco Bay Area.
- Association of Bay Area Governments, Bay Area Air Quality Management District, Metropolitan Transportation Commission, et al. 2002. Smart Growth Preamble and Policies.
- AT&T Inc. 2007. 10-K Annual Report. February 26.
- Bay Area Air Quality Management District. 1999. Bay Area Air Quality Management District California Environmental Quality Act Guidelines. December.
- Bay Area Air Quality Management District. 2006. Bay Area 2005 Ozone Strategy. January 4.
- Bay Area Economics. 2005. San Ramon Economic Development Strategic Plan: Economic Trends and Opportunities. July 15.
- Bishop Ranch. 2007. Website: <http://www.bishopranch.com/>. Accessed May 15, 2007.
- California Economic Development Department. 2007. Labor Force Data for Cities and Sub-County Areas. Website <http://www.edd.ca.gov/eddhome.htm>. Accessed May 17, 2007.
- California Energy Commission. 2007. The Role of Land Use in Meeting California's Energy and Climate Change Goals. June.
- California Department of Education. 2007. Educational Data Partnership. Website: <http://www.ed-data.k12.ca.us>. Accessed May 16, 2007.
- California Department of Finance. 2007. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2001-2007, with 2000 Benchmark. May.
- California Department of Transportation. 2007. "Scenic Highway System" Website <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>. Accessed May 14, 2007.
- California Department of Transportation. 2004. Transportation- and Construction-Induced Vibration Manual. June.
- California Integrated Waste Management Board. 2007. Website: <http://www.ciwmb.ca.gov>. Accessed May 21, 2007.
- California Department of Water Resources. 2003. Bulletin 118 Update 2003.
- Central Contra Costa Sanitary District. 2007. Development Capacity Analysis. June 21.

References

- Central Contra Costa Sanitary District. 2007. Website: <http://www.centalsan.org/>. Accessed May 21, 2007.
- Chevron Corporation. 2007. 10-K Annual Report. February 28.
- City of San Ramon. 2005. San Ramon Redevelopment Agency Component Unit Financial Statements. June 30.
- City of San Ramon. 2007. Website: <http://www.ci.san-ramon.ca.us/>. Accessed May 16, 2007.
- City of San Ramon. 2003. City Civic Center Final Environmental Impact Report. December.
- City of San Ramon. 2006. San Ramon Zoning Ordinance. Last Amended August 25.
- City of San Ramon. 2006. City of San Ramon Zoning Ordinance Final Negative Declaration.
- City of San Ramon. 2006. Addendum to the City of San Ramon Zoning Ordinance Final Negative Declaration.
- City of San Ramon. 2002. City of San Ramon General Plan 2020. Adopted March 5.
- City of San Ramon. 2001. City of San Ramon General Plan Final Environmental Impact Report.
- City of San Ramon. 2007. San Ramon Police Department 2006 Annual Report.
- Consulting Engineers and Land Surveyors of California. 2007. California Environmental Quality Act Guidelines.
- County of Contra Costa. 2007. Contra Costa County Hazardous Materials Business Plan.
- Contra Costa Health Services. 2007. Hazardous Materials Programs Website: <http://www.cchealth.org/groups/hazmat/>. Accessed June 18, 2007.
- Cooper, Robertson & Partners. 2007. San Ramon City Center Plans. April 30.
- DMJM Harris. 2007. Traffic Operations Evaluation. July.
- DeLorme. 2003. Northern California Gazetteer.
- Dotson, Irma M. 2001. History of the San Ramon Branch Line 1891-1978.
- Dublin San Ramon Services District. 2007. Website: <http://www.dsrdsd.com/>. Accessed May 21, 2007.
- Dublin San Ramon Services District-East Bay Municipal Utilities District Recycled Water Authority. 2007. Website: <http://www.derwa.org/>. Accessed May 21, 2007.

East Bay Municipal Utility District. 2007. Website: <http://www.ebmud.com>. Accessed May 21, 2007.

East Bay Municipal Utility District. 2007. 2006 Annual Report.

East Bay Municipal Utility District. 2007. 2006 Annual Water Quality Report.

East Bay Municipal Utility District. 2005. Plants and Landscapes For Summer Dry Climates.

East Bay Municipal Utility District. 2005. 2005 Urban Water Management Plan.

East Bay Regional Parks District. 2007. Website: <http://www.ebparks.org>. Accessed June 19, 2007.

Economic & Planning Systems. 2007. San Ramon Urban Decay Analysis - Final Report. June.

Eorio, Jeff. Director, City of San Ramon Parks and Community Services Department. Personal Communication: Phone Interview. June 6, 2007.

Herz, Michael. EMF Program Manager, Pacific Gas and Electric Company. Personal Communication: Phone Interview. June 20, 2007.

Holder, Scott. Chief, San Ramon Police Department. Personal Communication: Letter. June 5, 2007.

Kirkpatrick, William R. Manager of Water Distribution Planning Division, East Bay Municipal Utility District. Personal Communication: Letter. May 9, 2007.

Kleinfelder, Inc. 2007. Letter of Findings For a Focused Breeding Season Burrowing Owl Survey. May 18.

MACTEC Engineering and Consulting, Inc. 2007. Preliminary Geotechnical Investigation Report. May 31.

Martin, Glen. San Francisco Chronicle. "Big, new water project underway." May 8, 2007.

Martin, Glen; Lagos, Marisa. San Francisco Chronicle. "Historic water use deal reached." May 7, 2007.

Mentink, Michael. Deputy Fire Marshal, San Ramon Valley Fire Protection District. Personal Communication: Letter. June 7.

Michael Brandman Associates. 2007. Biological Resources Study. June 1.

Michael Brandman Associates. 2007. Phase I Environmental Site Assessment. June 7.

Mullings, Terry. Project Manager. Personal Communication: Letter. May 17, 2007.

References

- Natural Resources Conservation Service. 2007. Website: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed May 10, 2007.
- O'Donoghue, Laura. Deputy County Librarian/Public Services, Contra Costa County Library. Personal Communication: Email. May 25, 2007.
- Pacific Gas and Electric Company. 2007. 10-K Annual Report. February 22, 2007.
- Perault, Tina. Senior Planning and Development Manager, San Ramon Valley Unified School District. Personal Communication: Letter. June 19, 2007.
- Perkins, Jamie. Trail Development Deputy Program Manager, East Bay Regional Parks District. Personal Communication: Phone Interview. June 12, 2007.
- San Francisco Bay Regional Water Quality Control Board. 2006. Basin Plan. December 22.
- San Francisco Bay Regional Water Quality Control Board. 2006. The 2006 303(d) Impaired Water Bodies List.
- San Ramon Valley Fire Protection District. 2007. Website: <http://www.srvfire.ca.gov>. Accessed May 16, 2007.
- San Ramon Valley Fire Protection District. 2007. "Fire Line" Newsletter. Spring.
- San Ramon Valley Unified School District. 2007. Website: <http://www.srvusd.k12.ca.us/>. Accessed May 16, 2007.
- State of California. 2007. California Building Standards Code.
- Target Corporation. 2007. 10-K Annual Report. February 3, 2007.
- United States Environmental Protection Agency. 1998. Characterization of Building Related Construction and Demolition Debris in the United States. June.
- United States Environmental Protection Agency. 2007. "Asbestos and Vermiculite." Website: <http://www.epa.gov/asbestos/>. June 19, 2007.
- United States Environmental Protection Agency. 2007. "Polychlorinated Biphenyls (PCBs)." Website: <http://www.epa.gov/opptintr/pcb/>. Accessed June 19, 2007.
- United States Environmental Protection Agency. 2007. "Lead in Paint, Dust, and Soil." Website: <http://www.epa.gov/lead/index.html>. Accessed June 19, 2007.
- United States Environmental Protection Agency. 2007. "Radon (Rn)." Website: <http://www.epa.gov/radon/>. Accessed June 19, 2007.
- United States Geologic Survey. 1980. Diablo, California, 7.5-minute Topographic Quadrangle Map.

Western Regional Climate Center. 2007. "Historic Climate Summary - Alamo Weather Station."
Website: <http://www.wrcc.dri.edu>. Accessed June 18, 2007.

