

Draft

THE U.S. NAVY SITE AND ITS ENVIRONS SPECIFIC PLAN AMENDMENT (THE CROSSING HOTEL SITE)

Supplemental Environmental Impact Report

Prepared for
City of San Bruno

May 2015



Draft

THE U.S. NAVY SITE AND ITS ENVIRONS SPECIFIC PLAN AMENDMENT (THE CROSSING HOTEL SITE)

Supplemental Environmental Impact Report

Prepared for
City of San Bruno

May 2015



550 Kearny Street
Suite 800
San Francisco, CA 94108
415.896.5900
www.esassoc.com

Los Angeles

Oakland

Olympia

Petaluma

Portland

Sacramento

San Diego

Seattle

Tampa

Woodland Hills

130117

TABLE OF CONTENTS

The U.S. Navy Site and Its Environs Specific Plan Amendment (The Crossing Hotel Site) Draft Supplemental Environmental Impact Report

	<u>Page</u>
1. Introduction	1-1
A. Project Overview.....	1-1
B. Environmental Review	1-2
2. Summary	2-1
A. Project Description.....	2-1
B. Project Objectives.....	2-1
C. Environmental Impacts and Mitigation Measures	2-2
D. Alternatives	2-2
E. Issues of Concern.....	2-3
3. Project Description	3-1
A. Project Background	3-1
B. Project Objectives.....	3-1
C. Project Location and Setting.....	3-2
D. Project Planning Efforts	3-6
E. Project Approvals.....	3-11
4. Environmental Setting, Impacts, and Mitigation Measures	4-1
A. Air Quality	4.A-1
B. Climate Change and Greenhouse Gas Emissions.....	4.B-1
C. Transportation and Circulation.....	4.C-1
5. Alternatives to the Project	5-1
A. Introduction	5-1
B. Alternatives in the 2001 Draft EIR.....	5-2
C. Factors in the Selection of Alternatives.....	5-2
D. Description and Analysis of Alternatives.....	5-3
E. Environmentally Superior Alternative.....	5-8
F. Alternatives Considered but Rejected.....	5-9
6. Other Statutory Sections	6-1
A. Growth-Inducing Effects	6-1
B. Significant Irreversible Changes.....	6-2
C. Cumulative Impacts.....	6-2
D. Significant and Unavoidable Environmental Impacts	6-3
7. Report Preparers	7-1

	<u>Page</u>
Appendices (provided on CD inside back cover)	
Appendix A. Notice of Preparation (NOP)	A-1
Appendix B. Comments Received in Response to the NOP	B-1
Appendix C. Initial Study... ..	C-1
Appendix D. Air Quality, Greenhouse Gas, and Health Risk Assessment Data	D-1
Appendix E. Transportation Data	E-1

List of Figures

3-1 Project Location Map.....	3-3
3-2 Hotel Site Overview	3-4
3-3 U.S. Navy Site Specific Plan Land Use Diagram.....	3-5
3-4 Preliminary Site Plan	3-9
3-5 Site Design Renderings.....	3-10
4.C-1 Existing Peak Hour Traffic Volumes.....	4.C-3
4.C-2 Existing Plus Project Peak Hour Traffic Volumes	4.C-15
4.C-3 Cumulative Peak Hour Traffic Volumes.....	4.C-21
4.C-4 Cumulative Plus Project Peak Hour Traffic Volumes.....	4.C-22

List of Tables

2-1 Summary of Impacts and Mitigation Measures.....	2-4
4.A-1 Air Quality Data Summary (2011-2013) – Arkansas Street Station	4.A-4
4.A-2 Ambient Air Quality Standards and Bay Area Attainment Status.....	4.A-9
4.A-3 Average Daily Construction-related Pollutant Emissions.....	4.A-16
4.A-4 Operation-related Pollution Emissions	4.A-16
4.B-1 San Bruno Communitywide GHG Emissions Inventory Summary – 2005.....	4.B-5
4.B-2 Estimated Emissions of Greenhouse Gases from Construction and Operation of the Project	4.B-17
4.C-1 Definitions for Signalized Intersection Level of Services	4.C-6
4.C-2 Existing (2013) Intersection Levels of Service and Average Vehicle Delay.....	4.C-7
4.C-3 Project Trip Generation	4.C-13
4.C-4 Project Trip Distribution Percentages	4.C-14
4.C-5 Existing Plus Project Intersection Levels of Service	4.C-14
4.C-6 Cumulative (2030) Peak-Hour Intersection Levels of Service	4.C-23
4.C-7 Cumulative (2030) Plus Project Peak-Hour Intersection Levels of Service	4.C-23
5-1 Comparison of Impacts of Project Alternatives (After Mitigation).....	5-8

CHAPTER 1

Introduction

This chapter discusses the preparation of a supplement to the *U.S. Navy Site and Its Environs Specific Plan Environmental Impact Report* (SCH# 99092026) (Specific Plan EIR) that addresses new information of substantial importance that was not known at the time that the Specific Plan EIR was certified in January 2001. The new information involves amendments to the Specific Plan and a discussion of impacts related to greenhouse gas emissions. This chapter discusses the reason for preparing a Supplemental EIR as opposed to a Subsequent EIR and the process for preparing the document. This chapter also outlines the organization of the document.

A. Project Overview

The City of San Bruno (City), as the Lead Agency, has prepared this draft Supplemental Environmental Impact Report (Supplemental EIR) to evaluate the potential environmental effects of the proposed amendments to the Specific Plan, which was adopted by the City of San Bruno in January 2001 (as amended in 2002 and 2005).¹ The proposed project comprises amendments to the Specific Plan to decrease the size of the hotel. Because construction and operation of the hotel is a reasonably foreseeable consequence of the project, impacts of the construction and operation of the reduced-size hotel allowed by the amendment are also analyzed.

A detailed description of the proposed project is provided in Chapter 3, Project Description. The project for CEQA purposes is the amendments to the Specific Plan to decrease the size of a hotel.

Project Location and Description

The project site is located at the intersection of Interstate 380 and El Camino Real, on Admiral Court in San Bruno, California. The proposed project site encompasses two separate parcels, identified by the San Mateo County Assessor's Office as Assessor Parcel Numbers (APNs): 020-013-250 and 020-013-260, both of which are owned by the City of San Bruno.

The Crossing development was the primary project area for the U.S. Navy Site and Its Environs Specific Plan as amended through 2005 to include the El Camino Real (ECR) Commercial Overlay. The Specific Plan allowed for up to a 500-room hotel of up to seven stories (90 feet maximum height), including ground floor lobby and service area and 15,000 square feet of meeting/retail

¹ The Specific Plan was amended in 2002 and 2005 to increase residential densities on the site and to provide for the El Camino Real (ECR) Commercial Overlay respectively. Addendums to the 2001 EIR were prepared in both cases.

space. The Specific Plan requires one parking space per room with a potential 15 percent reduction for shared parking and envisions a parking structure integrated into the main building.

The proposed project includes several amendments to the Specific Plan that would reduce the scale of the hotel envisioned in the Specific Plan. As noted, the Specific Plan currently allows for a hotel with up to 500 rooms on 5.5 acres. The amendment would reduce this number to a 152-room hotel on 1.5 acres. The hotel allowed under the Specific Plan description would also be revised from a full-service hotel to a select-service hotel providing limited food service facilities rather than a full restaurant. It would also include a conference space with theater-style seating that would accommodate approximately 300 people, banquet-style seating for sit-down events to accommodate approximately 200 people, or ballroom-style arrangements for wedding events to accommodate up to 150 people, depending on configuration for a given event. The proposed amendments are summarized herein and are available for review at City offices and on the San Bruno Community Development Department website.

B. Environmental Review

Supplemental EIR

The City of San Bruno is the lead agency for this Supplemental EIR (pursuant to State and local guidelines for implementing the California Environmental Quality Act [CEQA]), and has prepared this Supplemental EIR subject to CEQA (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations 15000, et seq.) promulgated thereunder.

This Supplemental EIR is prepared in accordance with Public Resources Code Section 21166 and CEQA *Guidelines* Sections 15162 and 15163. Pursuant to Section 15163(a), the City considers the project's proposed Specific Plan Amendments to be "minor changes" that trigger the need for a supplement to the previously certified 2001 Specific Plan EIR due to the involvement of new potentially significant impacts or a substantial increase in the severity of previously identified significant impacts. Specifically, this Supplemental EIR evaluates potentially significant impacts related to Air Quality (health risk), Transportation and Greenhouse Gases.

As stated above, the Project for CEQA purposes is the amendments to the Specific Plan to decrease the size of a hotel.

Focus of Supplemental EIR Analysis

Since development of the hotel site, known as The Crossing, was analyzed as part of the Specific Plan EIR which the City of San Bruno certified in 2001, the standard for determining whether further CEQA review is required for the currently proposed project is established by Public Resources Code Section 21166 and CEQA *Guidelines* Section 15162. Public Resources Code Section 21166 states:

When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs:

- (a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report.
- (b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.
- (c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

Public Resources Code 21166 applies to the proposed project because in-depth CEQA review has already occurred for a conceptual hotel project on the project site and the time for challenging the sufficiency of the Specific Plan EIR has passed. CEQA Guidelines Sections 15162 and 15163 guide lead agencies in implementing Public Resources Code Section 21166 and deciding whether further CEQA review is necessary, and if so, in what form. Pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15163, the City has prepared a supplement to the Specific Plan EIR because while conditions in Section 15162 requiring further CEQA review exist, only minor additions/changes are necessary to make the previous EIR adequately apply to the Specific Plan Amendment for The Crossing Hotel Site. The minor additions/changes necessary are those related to the proposed amendments; no other changes are proposed to the existing Specific Plan. A Supplemental EIR was determined to be necessary for the project because the City determined there was substantial evidence that the proposed project may have a significant effect on the environment due to proposed changes and/or new information for specific topic areas. Those topic areas which are analyzed in this Supplemental EIR include Air Quality, Transportation, and Greenhouse Gases.

Initial Study

As stated in the preceding section, the City has prepared this Supplemental EIR to analyze the potential environmental effects of the proposed Specific Plan Amendment pertaining to the development of The Crossing Hotel site. The City prepared an Initial Study Checklist to determine the scope of this Supplemental EIR. The Checklist identified the issues that would be the focus of the Supplemental EIR (see **Appendix C**). The California Environmental Quality Act (CEQA) requires that, before a project with potentially significant environmental effects may be approved, an EIR must be prepared that fully describes the environmental effects of the project, identifies mitigation measures to lessen or eliminate adverse impacts, and examines feasible alternatives to the project. The information contained in the Supplemental EIR is to be reviewed and considered by the lead agency prior to the ultimate decision to approve, disapprove, or modify the proposed project.

Public Review of Draft Supplemental EIR

This Draft Supplemental EIR is available for public review for the period indicated on the Public Notice of Availability of this document. The Supplemental EIR would be circulated without the prior EIR, as permitted by CEQA *Guidelines* Section 15163(d); however, the prior EIR may be reviewed at the same locations. During the public review period, written comments on the adequacy of the Draft Supplemental EIR may be submitted to:

Mark Sullivan
City of San Bruno
567 El Camino Real
San Bruno, CA 94066

Written comments may also be submitted via email to msullivan@sanbruno.ca.gov with “The Crossing Hotel Draft Supplemental EIR” noted in the subject line.

Responses to all substantive comments received on the adequacy of the Draft Supplemental EIR and submitted within the specified review period will be prepared and included in the Responses to Comments/Final Supplemental EIR. Prior to approval of the project, the City of San Bruno must certify the Final Supplemental EIR and adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures identified in the Supplemental EIR, in accordance with the requirements of PRC Section 21001.

Scope of Supplemental EIR

Topics Addressed in this Supplemental EIR

Pursuant to PRC Section 21166 and CEQA *Guidelines* Sections 15162 and 15163, through preparation of the Initial Study Checklist, the City concluded that additional environmental review in a Supplemental EIR shall be conducted for the following topics:

- Air Quality
- Greenhouse Gas Emissions
- Transportation and Circulation

The environmental analysis for each of the topics listed above is presented in Chapter 4 of this document.

Topics Not Addressed In Detail in This Supplemental EIR Based on Preparation of the Initial Study

The information and analysis presented in the Initial Study provides substantial evidence for the conclusion, for all the issues listed below (i.e., those *not* addressed in detail this Supplemental EIR), that 1) CEQA standards triggering preparation of further environmental review do not exist for those issues and 2) impacts under these topics would not have new or substantially more severe impacts than those identified in the Specific Plan EIR. Topics not addressed in this Supplemental EIR in detail are listed below by impact determination category identified in Appendix G, the

Environmental Checklist Form. These topics are, however, analyzed in the Initial Study, within **Appendix C** of this Supplemental EIR.

- Aesthetics
- Agricultural Resources
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

Alternatives to the Project

CEQA requires that an EIR discuss a reasonable range of alternatives to the proposed project. This Supplemental EIR describes and analyzes a reasonable range of alternatives, including a “No Project” alternative as required under CEQA (CEQA *Guidelines* Section 15126.6[e]). Chapter 5 of this document discusses the environmental effects of each alternative, compares the environmental effects of each alternative with the environmental setting and with the effects of the project and each other alternative, and addresses the relationship of each alternative to the project objectives. The determinations of the lead agency concerning the feasibility, acceptance, or rejection of each and all alternatives considered in this Supplemental EIR will be addressed and resolved in the City’s findings, when the City of San Bruno considers approval of the project, as required by CEQA.

Environmental Baseline

Under CEQA, the environmental baseline for a proposed project analyzed in an EIR is typically the physical environmental conditions that exist in the vicinity of the project at the time the Notice of Preparation (NOP) is published (see **Appendix A**). The NOP for this project was published on November 3, 2014, and this is the date assumed for the “baseline” conditions against which the environmental impacts of the proposed project will be analyzed.

Organization of this EIR

This EIR is organized as follows:

- **Chapter 1, *Introduction***, introduces the project, the relevant CEQA requirements, and the intended use of the EIR.
- **Chapter 2, *Summary***, contains an overview of the document and allows the reader to easily reference the analysis of potentially significant effects, proposed mitigation measures, residual environmental impacts after mitigation, if any, and alternatives to the project that reduce or avoid significant effects on the environment. Table 2-1, Summary of Impacts and Mitigation Measures, is provided at the end of Chapter 2.

- **Chapter 3, *Project Description***, identifies the project location and includes a description of the project, the objectives of the project, the anticipated phasing of the project, the required project approvals, and the other agencies that must consider aspects of the project.
- **Chapter 4, *Environmental Setting, Impacts and Mitigation Measures***, contains a discussion of the setting (existing conditions and regulatory framework), the environmental impacts (including cumulative impacts) that could result from the project, and the mitigation measures that would reduce or eliminate the identified adverse impacts. As appropriate and relevant, the project has been assessed for potential impacts during both construction and operation, and mitigation measures are identified accordingly. The criteria used to assess the significance of adverse environmental effects are identified, and the significance of the impact both before and after mitigation is reported.
- **Chapter 5, *Alternatives to the Project***, evaluates a reasonable range of alternatives to the proposed project. This chapter provides a discussion of the environmental impacts associated with each alternative, compares the relative impacts of each alternative to those of the project and the other alternatives, and discusses the relationship of the alternatives to the project sponsor's objectives.
- **Chapter 6, *Other Statutory Sections***, discusses the project's potential for inducing growth and summarizes cumulative impacts, unavoidable significant impacts, and effects found not to be significant.
- **Chapter 7, *Report Preparers***, identifies the EIR preparers, including the lead agency staff and consultants. Persons and documents consulted during preparation of the EIR are listed in the Reference section at the end of each analysis section in Chapter 4.

All reference documents listed at the end of each analysis section in Chapter 4 are available for public review at the City of San Bruno Planning Department located at 567 El Camino Real, San Bruno, California, 94066.

The Appendices include the Notice of Preparation (NOP), comments received on the NOP, the Initial Study, supporting background documents, and technical information used in the impact analyses.

Notice of Preparation

A Notice of Preparation (NOP) was prepared by the City of San Bruno to obtain comments from agencies and the public regarding issues to be addressed in the EIR. The Notice of Preparation is included as **Appendix A** to the EIR.

On November 3, 2014, the City sent the NOP to governmental agencies and organizations and persons interested in the proposed project to solicit input and to identify any concerns or issues that should be included in the EIR. The NOP was circulated for 30 days, with the review period closing on December 3, 2014. Copies of the comments received in responses to the NOP are included in **Appendix B**.

This EIR was prepared based on the comments received on the Notice of Preparation and the project information provided. Environmental factors marked with an "X" below are addressed in

this EIR. It was determined that the environmental factors not designated with an “X” below would not warrant further discussion in the EIR because they would not involve a potentially significant impact:

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Air Quality / GHG |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation / Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

Intended Uses of the Supplemental EIR

Pursuant to CEQA, this Supplemental EIR is a public information document prepared for use by governmental agencies and the public to identify and evaluate potential environmental consequences of the activities facilitated by the proposed project, to evaluate and recommend mitigation measures that would substantially lessen or eliminate significant adverse environmental impacts, and to examine a reasonable range of feasible alternatives to the project. This Supplemental EIR provides the environmental information and evaluation necessary for the planning, construction, and operation of the proposed project. This EIR also provides the CEQA compliance documentation upon which the City’s consideration of, and action on, all applicable approvals (collectively, “approvals”) may be based. These include all approvals set forth in this Supplemental EIR, as well as any additional approvals that may be necessary or useful to such activities such as planning, construction, operation, and maintenance. Pursuant to CEQA *Guidelines* Section 15163(e), in considering the proposed project for approval, the City would also consider the Specific Plan EIR as revised by this Supplemental EIR.

This page intentionally left blank

CHAPTER 2

Summary

A. Project Description

The Crossing development was the primary project area for the *U.S. Navy Site and Its Environs Specific Plan EIR* certified by the City of San Bruno in 2001 and amended through 2005 to include the El Camino Real (ECR) Commercial Overlay. The Specific Plan and supporting Environmental Impact Report (EIR) allow for up to a 500-room hotel of up to seven stories (90'-0" maximum height), including ground floor lobby and service area and 15,000 square feet of meeting/retail space. The Specific Plan requires one parking space per room with a potential 15 percent reduction for shared parking and envisions a parking structure integrated into the main building.

The proposed project includes several amendments to the Specific Plan that would reduce the scale of the hotel approved in the Specific Plan. As noted, the Specific Plan currently allows for a hotel with up to 500 rooms on 5.5 acres. The amendment would reduce this number to a 152-room hotel on 1.5 acres. The hotel allowed under the Specific Plan description would also be revised from a full-service hotel to a select-service hotel providing food service facilities rather than a restaurant and a conference space with theater-style seating that would accommodate approximately 300 people, banquet-style seating for sit-down events to accommodate approximately 200 people, and ballroom-style arrangements for wedding events to accommodate up to 150 people.

B. Project Objectives

CEQA *Guidelines* Section 15124(b) requires that the project description of an EIR contain a statement of objectives for the proposed project. The City of San Bruno has identified the following objectives:

The City of San Bruno developed project objectives for the Specific Plan area in the 2001 EIR. The following objectives were selected from that list because the proposed hotel fulfills the Specific Plan objectives, however not all of the original objectives are included here:

- 1) Establish a physical plan for the gradual transition of the Specific Plan area to urban uses near major transportation corridors that support the area's intended transportation/transit role;
- 2) Establish land uses that help assure long-term economic vitality and sustainability for the City;
- 3) Establish policies and guidelines that encourage a comprehensive new development and reuse of the U.S. Navy site to complement and enhance existing uses in a consolidated and more economically efficient land use pattern;

- 4) Implement design and development standards to create a visually attractive gateway development based upon the principles of a pedestrian-friendly, Transit-Oriented Development (TOD);
- 5) Develop job opportunities that are transit accessible;
- 6) Create environmentally sensitive development; and
- 7) Facilitate realistic development that can be expeditiously implemented.

The objectives specific to this project are to:

- 1) Further the goals and policies of the U.S. Navy Specific Plan;
- 2) Develop a hotel that will attract regional, national, and international visitors due to its proximity to San Francisco International Airport, I-380 and US 101; and
- 3) Complement existing retail, recreation and visitor-serving land uses in the vicinity.

C. Environmental Impacts and Mitigation Measures

Potentially significant environmental impacts of the proposed project are summarized in **Table 2-1**. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation (significant and unavoidable); significant impacts that could be mitigated to a less than significant level (significant but mitigable); and impacts that would not be significant (less than significant). For each significant impact, the table includes a summary of mitigation measure(s) and an indication of level of significance after implementation of mitigation measures. Table 2-1 also provides a list of the potentially significant impacts that were identified in the Initial Study (**Appendix C**) and the associated mitigation measures that would apply to the project. A complete discussion of each impact and associated mitigation measures are provided in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures* and in Appendix C.

D. Alternatives

Chapter 5 of this EIR analyzes a range of reasonable alternatives to the proposed project, including the No Project Alternative (required by the CEQA for all EIRs). Per CEQA *Guidelines* Section 15126.6[f] the Lead Agency, the City of San Bruno, identified the following reasonable range of project alternatives to be addressed in this EIR:

- Alternative 1: No Project Alternative (Existing Conditions, No Change)
- Alternative 2: Reduced Development Alternative

The Alternatives discussion of this Supplemental EIR was prepared in accordance with Section 15126[d] of the CEQA *Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the proposed project while feasibly attaining most of the basic objectives. This Supplemental EIR identifies the Reduced Development Alternative as the “environmentally superior” alternative, as it would reduce impacts to air quality and greenhouse gas emissions.

E. Issues of Concern

Issues of concern regarding the proposed project include construction, air quality, greenhouse gas emissions, and traffic and circulation. These issues are fully addressed in the analyses sections in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this document.

**TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the EIR			
A. Air Quality			
<p>4.A-1: The proposed project could potentially conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)</p>	<p>None required.</p>	<p>Less than Significant</p>	<p>No New or Substantially More Severe Impact.</p>
<p>4.A-2: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation. (Significant)</p>	<p>H.1.a: The City shall condition approval of individual development proposals under the Specific Plan on implementation of an appropriate dust abatement program, patterned after the BAAQMD approach described herein. <u>The following will be required for all construction activities within the project area. These measures will reduce fugitive dust emissions primarily during soil movement and grading activities, but also during vehicle and equipment movement on unpaved project sites:</u></p> <ol style="list-style-type: none"> 1. <u>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</u> 2. <u>All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</u> 3. <u>All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</u> 4. <u>All vehicle speeds on unpaved roads shall be limited to 15 mph.</u> 5. <u>All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</u> 6. <u>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.</u> 7. <u>All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</u> 	<p>Less than Significant</p>	<p>Mitigation Measures in the Prior EIR Adequately Address Impacts. (Updated to reflect current standards)</p>

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the EIR (cont.)			
A. Air Quality (cont.)			
4.A-2 (cont.)	8. <u>A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.</u>		
4.A-3: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially expose sensitive receptors to substantial pollutant concentrations. (Significant)	New 4.A-3: <u>The project sponsor shall ensure that construction contract specifications include a requirement that all off-road diesel-powered construction equipment used for project improvements be equipped with engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 2 off-road emission standards, and are fitted with Level 3 Verified Diesel Emissions Control (VDEC), which would reduce diesel particulate emissions by at least 85 percent. (Engines meeting Tier 4 [Interim or Final] emission standards automatically meet the Level 3 VDEC requirement and no additional emissions control is required.)</u>	Less than Significant	New Information Showing New or More Severe Impacts; Newly Feasible or Different Mitigation Measures or Alternatives
4.A-4: The construction and operation of a hotel allowed under the Specific Plan Amendment could potentially contribute to a cumulative air quality impact in which the project region is non-attainment. (Less than Significant)	None required.	Less than Significant	No New or Substantially More Severe Impact
4.A-5: Construction of a hotel allowed under the Specific Plan Amendment could potentially contribute to a cumulative health risk impacts during construction. (Significant)	Implement New Mitigation Measure 4.A-3 (detailed above).	Less than Significant	New Information Showing New or More Severe Impacts; Newly Feasible or Different Mitigation Measures or Alternatives
B. Climate Change and Greenhouse Gas Emissions			
4.B-1: Construction and operation of a hotel allowed under the Specific Plan Amendment would result in an increase in GHG emissions. (Less than Significant)	None required	Less than Significant	No New or Substantially More Severe Impact
4.B-2: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially conflict with the AB 32 Scoping Plan or City of San Bruno Plans and Policies for reducing GHG emissions. (Less than Significant)	None required	Less than Significant	No New or Substantially More Severe Impact

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the EIR (cont.)			
C. Transportation and Traffic			
4.C-1: Construction activities associated with the proposed project allowed under the Specific Plan Amendment could potentially result in temporary circulation impacts on the street system. (Less than Significant)	None required		No New or Substantially More Severe Impact
4.C-2: The proposed project allowed under the Specific Plan Amendment could potentially increase traffic at local intersections in the project vicinity. (Less than Significant)	None required		No New or Substantially More Severe Impact
4.C-3: The proposed project allowed under the Specific Plan Amendment could potentially increase hazards due to a design feature or incompatible uses. (Less than Significant)	None required		No New or Substantially More Severe Impact
4.C-4: The proposed project allowed under the Specific Plan Amendment could potentially result in inadequate emergency access. (Less than Significant)	None required		No New or Substantially More Severe Impact
4.C-5: The proposed project allowed under the Specific Plan Amendment could potentially conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (Less than Significant)	None required		No New or Substantially More Severe Impact
4.C-6: The proposed project allowed under the Specific Plan Amendment could potentially contribute to cumulative increases in traffic at local intersections in the project area in 2030. (Less than Significant)	None required		No New or Substantially More Severe Impact
Mitigation Measures from the Initial Study			
4. Biological Resources			
4.a: Would the project 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? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	G.1.b: In the event that tree removal is required, a tree removal permit would be obtained from the City of San Bruno. The City would assure that the conditions contained within the appropriate tree removal permit would be followed. The following measures are also applicable for removed trees. <ul style="list-style-type: none">• Tree removal will not occur between <u>February 1 and August 31</u> during March through June without a bird survey <u>conducted by a qualified biologist</u> to determine that the tree is unused during the	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
4. Biological Resources (cont.)			
<p>4.a (cont.)</p>	<p>breeding season by avian species that are protected under California Fish and Game Codes 3503, 3503.5, and 3511. If bird species are detected or <u>active nests are observed</u>, the District will obtain the necessary permits from California Fish and Game, and will comply with permit conditions for protecting these species, which will likely involve seasonal avoidance or construction “exclusion zones” around nest sites. <u>Buffer zones will be avoided during construction activities until young have fledged or the nest is otherwise abandoned.</u></p> <ul style="list-style-type: none"> • A qualified biologist shall conduct bat surveys to determine whether any mature trees that would be removed during project construction provides hibernacula or nursery colony roosting habitat. Exclusion should be conducted at specific times of the year. Winter roosts are generally occupied between October 15 and January <u>February 28</u>, and maternity colonies are generally occupied between February <u>April 15</u> and July <u>August 31</u>30. Therefore, exclusion, if required, should be conducted generally between August 15 and October 15 and between February <u>March 1</u> and February <u>April 4</u> <u>15</u>. If bats are using trees that need to be removed, the roosting season of the colony should be determined and the removal of the tree conducted when the colony is using an alternate roost. • The City of San Bruno will require replacement of all removed street trees with native trees and will require that the replaced trees be incorporated into a landscape plan for site development that is submitted to the City for review and approval. 		
<p>4.e: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>G.1.a: The City of San Bruno, to the extent feasible, will avoid removal of, or damage to all street trees, as designated by the City of San Bruno Tree and Planting Ordinance. The following presents limitations for construction within and around trees to be preserved:</p> <ul style="list-style-type: none"> • <u>A certified arborist shall be contracted to perform a tree survey of the site to confirm the presence or absence of heritage trees within the project site prior to construction. The survey will also confirm the presence of trees that are to remain onsite according to the Tree Disposition Plan (2001).</u> 	<p>Less than Significant</p>	<p>Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)</p>

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
4. Biological Resources (cont.)			
4.e (cont.)	<ul style="list-style-type: none"> • <u>Should heritage trees be present within the project site, a certified arborist shall determine appropriate protective measures to be implemented during construction and which may include but is not limited to the following:</u> <ul style="list-style-type: none"> - <u>A certified arborist shall be consulted prior to construction to accurately locate root protection zones and identify other specific measures that would limit potential indirect impacts on trees that may be encroached upon.</u> For all development that would encroach into the feeder root zone (drip-line) or a 12-foot radius from the trunk, whichever is greater, of a preserved tree, special construction techniques to allow roots to breath and obtain water will be required, as determined by the City of San Bruno (e.g., use hand equipment for trenching, protect natural resources with highly visible protective fencing, allow only one pass through an area with preserved trees). - The existing ground surface within the drip-line of any tree will not be cut, filled, or compacted unless otherwise approved by the City of San Bruno. Excavation adjacent to any trees, when permitted, will be in such a manner that will cause only minimal root damage. Permission and inspection will be required prior to back-filling. - <u>Construction staging areas shall be designated on plans and prohibit parking, loading, digging (especially trenching), and grading during all construction activities within root protection zones of all trees.</u> There will be no parking or storing of vehicles, equipment, machinery, construction materials, or construction trailers, and no mechanical excavation, construction of buildings or dumping of oils or chemicals within the drip-lines of any trees. - Prior to the start of any clearing, stockpiling, trenching, grading, compaction, paving, or change in ground elevation on a site with saved protected trees, fencing will be installed at the drip-line. Prior to grading or issuance of any permits, the fences may be inspected and the location thereof approved by appropriate county staff. The county requires the installation of a 6-foot-high chain-link fence around the 		

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
4. Biological Resources (cont.)			
<p>4.e (cont.)</p>	<p>drip-line of preserved trees during construction and demolition phases. <u>A 4-inch-layer of chipped bark mulch should be placed over the soil surface within the fenced dripline prior to installing temporary fencing. Suitable mulch must contain bark "fines." Maintain this layer of mulch throughout construction.</u></p> <ul style="list-style-type: none"> - Pruning shall be overseen by a certified arborist for all protected trees, <u>and should be done to clean and raise canopy per International Society of Arboriculture pruning standards.</u> - <u>A drainage plan shall be designed that will avoid heritage trees.</u> - <u>Construction drawings shall accurately locate areas to be avoided such as tree trunks and root protection zones.</u> - <u>A pre-construction meeting conference shall be held with contractors to review BMPs and require bonding and fines to ensure the replacement of any inadvertently damaged trees.</u> - <u>Whenever possible, existing grade shall be maintained within the fenced portion of the dripline.</u> 		
5. Cultural Resources			
<p>5.b: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>N.1b: If cultural resources or human remains, <u>prehistoric or historic-period archaeological resources</u> are encountered during construction of a project <u>under the Redevelopment Plan, all construction activities within 100 feet will halt</u> and the resources and their context shall not be further disturbed until a qualified cultural resource consultant has evaluated the situation. The City of San Bruno shall assure that identified cultural resources are recorded on proper historical properties forms.</p> <p><u>A Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation will be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be</u></p>	<p>Less than Significant</p>	<p>Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)</p>

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
5. Cultural Resources (cont.)			
5.b (cont.)	<u>accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist will prepare and implement a detailed treatment plan in consultation with the City of San Bruno. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan will include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.</u>		
5.c: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	Implement Mitigation Measure N.1b.	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
5.d: Would the project disturb any human remains, including those interred outside of formal cemeteries? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	Implement Mitigation Measure N.1b.	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
8. Hazards and Hazardous Materials			
8.a: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	L.1.d: The City of San Bruno will require all proposed project sponsors to submit a Phase II report, <u>based on the September 17, 2013 Phase I findings</u> , and subsequent reports as may be required by the City of San Bruno, completed no more than 18 months prior to approval of a proposed project by City Council to assure no additional contamination is present from overlooked USTs or other unknown sources. The City of San Bruno will require that any project sponsor incorporate the recommendations of the Phase II report into the design of the proposed project.	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
8. Hazards and Hazardous Materials (cont.)			
<p>8.b: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>Implement Mitigation Measure L.1.d (detailed above).</p>	<p>Less than Significant</p>	<p>Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)</p>
<p>8.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 in the project area? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>C.1a: The City of San Bruno will require that all building heights and associated roof structures proposed under the Specific Plan be consistent with the height limitations defined by FAR Part 77. Prior to issuance of any demolition or construction permits, the City of San Bruno shall require the project sponsors for any project within the Specific Plan area to provide appropriate notification to the FAA via FAA Form 7460-1.</p> <p>C.1b: The City of San Bruno shall prohibit the following uses within the Specific Plan area:</p> <ul style="list-style-type: none"> • Any use that would direct a steady or flashing light of white, red, green, or amber color toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing, other than FAA-approved navigational lights. • Any use that would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or engaged in straight final approach toward a landing. • Any use that would generate smoke or rising columns of air. • Any use that would attract large concentrations of birds within approach-climbout areas. • Any use that would generate electrical interference that may interfere with aircraft communications or aircraft instrumentation. <p>C.1c: The City shall require all sponsors of new dwelling units and/or buildings for human occupation to record a notice of fair disclosure, regarding the proximity of the proposed development to San Francisco International Airport and of the potential impacts of aircraft operation, per the recommendations contained in the Final Report of the 1998 San Mateo County Civil Grand Jury, as implemented by the City of San Bruno.</p>	<p>Less than Significant</p>	<p>Mitigation Measures in the Prior EIR Adequately Address Impacts</p>

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
9. Hydrology and Water Quality			
<p>9.a: Would the project violate any water quality standards or waste discharge requirements? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>G.3a: The City shall require all contractors to develop and implement a SWPPP, as required by the State Water Resources Control Board <u>NPDES General Construction Permit</u>, for areas to be disturbed by construction activities of five acres or more. The City would additionally require contractors on construction projects of less than five acres that have the potential to degrade water quality to prepare an SWPPP even though they are not required by law to do so. <u>At a minimum, the SWPPP shall include the following:</u></p> <ul style="list-style-type: none"> • <u>A construction schedule that restricts excavation and grading activities to the dry season (generally April 15 to October 15) to reduce erosion associated intense rainfall and surface runoff. The construction schedule shall indicate a timeline for earthmoving activities, hydroseeding, and stabilization of soils;</u> • <u>Soil stabilization techniques such as hydroseeding and short-term biodegradable erosion control blankets;</u> • <u>Silt fences, hay bales, or some kind of inlet protection at downstream storm drain inlets; and</u> • <u>The post-construction inspection of all drainage facilities and clearing of drainage structures of debris and sediment.</u> 	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)
<p>9.c: Would the project substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>G.2a: The City of San Bruno shall require, for incorporation into all redevelopment designs, permanent stormwater controls such as vegetated swales, retention ponds, landscape areas, etc., <u>in accordance with MS4 NPDES and San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) requirements</u>, for the stormwater collected from new parking lots and other impervious surfaces.</p> <p>G.2b: To help minimize the amount of runoff containing urban pollutants, streets, and parking areas in the redevelopment subareas shall be frequently cleaned by the City of San Bruno using street-sweeping equipment, and the collected material properly disposed.</p>	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)
<p>9.d: Would the project substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	Implement Mitigation Measures G.2a and G.2b (detailed above).	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
9. Hydrology and Water Quality (cont.)			
9.e: Would the project 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? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	Implement Mitigation Measure G.2a.	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
12. Noise			
12.a: Would the project result in 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? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	I.3.b: All development under the proposed Specific Plan shall be constructed to comply with the relevant noise insulation standards contained in Title 24 of the California Code of Regulations (Part 2, Appendix Chapter 12A). I.1: <u>The project applicant will obtain a permit to construct from the Director of Public Works prior to the start of construction activities, since construction would exceed the specified noise levels in the City Municipal Code.</u> Noise-generating construction activities would be limited to reasonable daytime hours, such as between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and 8:00 a.m. and 6:00 p.m. on Saturdays and Sundays. <u>No construction activities will be allowed on weekends or national holidays.</u> Information concerning construction-related activities and construction hours should be distributed throughout the affected areas and incorporated as part of the Specific Plan, heavy construction activities would be prohibited on Saturdays and Sundays.	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts (Updated to reflect current standards)
12.b: Would the project result in Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	Implement Mitigation Measure I.1 (detailed above).	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
12.d: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Mitigation Measures in the Prior EIR Adequately Address Impacts)	Implement Mitigation Measure I.1 (detailed above).	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts

**TABLE 2-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact/Initial Study Checklist Question	Mitigation Measures	Level of Significance after Mitigation	Comparison to 2001 EIR Findings
Mitigation Measures from the Initial Study (cont.)			
14. Public Services			
<p>14.a.i: Would the project result in substantial adverse physical impacts associated with the provision of, or the 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 following public services: i) Fire Protection? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>F.1: The City of San Bruno shall install signals that can be pre-empted by fire protection or emergency medical response vehicles. Developers shall contribute a “fair share” portion of the costs of these pre-emptive signals as determined by the City of San Bruno.</p>	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
<p>14.a.iii: Would the project result in substantial adverse physical impacts associated with the provision of, or the 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 following public services: iii) Schools? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>F.4: The City of San Bruno shall coordinate payment to the appropriate school districts of the school impact fee required by California Senate Bill 50.</p>	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts
17. Utilities and Service Systems			
<p>17.c: Would the project 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? (Mitigation Measures in the Prior EIR Adequately Address Impacts)</p>	<p>Implement Mitigation Measures G.2a, G.2b, and G.3a (detailed above under Hydrology and Water Quality).</p> <p>E.6: Prior to the issuance of building permits, the City of San Bruno shall require that all designs for residential and commercial development within the Specific Plan area include adequate storage space for projected recyclable and compostable materials. The City shall require adequate storage space on each floor of each building and in its enclosed garbage areas, as well as adequate loading space, to accommodate the City of San Bruno’s recycling program.</p> <p>E.7: As a condition of project approval and before demolition and construction, the City of San Bruno shall require the demolition and construction contractors to maximize diversion of materials remaining from the demolition of structures and the byproducts of construction. The City shall require that project sponsors work with the City of San Bruno’s Public Works Department and submit a recovery plan for maximizing diversion of construction and demolition materials associated with construction of any project in the Specific Plan area, so that at least 50 percent of the demolition debris is, if feasible, recycled or can be used as alternative landfill cover.</p>	Less than Significant	Mitigation Measures in the Prior EIR Adequately Address Impacts

CHAPTER 3

Project Description

A. Project Background

The City of San Bruno proposes to amend the *U.S. Navy Site and Its Environs Specific Plan* (Specific Plan) to allow development of approximately 1.5 acres of property within The Crossing Development at the U.S. Navy Site in San Bruno. The Crossing was the primary project area for the Specific Plan. The City of San Bruno City Council adopted the U.S. Navy Site and Its Environs Specific Plan and certified the Final EIR in 2001. The Specific Plan was amended through 2005 to include the El Camino Real (ECR) Commercial Overlay. The Specific Plan and supporting Environmental Impact Report (EIR) allow for up to a 500-room hotel and up to seven stories (90'-0" maximum height), including ground floor lobby and service area and 15,000 square feet of meeting/retail space. The Specific Plan requires one parking space per room with a potential 15 percent reduction for shared parking and envisions a parking structure integrated into the main building.

The proposed project includes several amendments to the Specific Plan that would reduce the scale of the hotel approved in the Specific Plan. As noted, the Specific Plan currently allows for a hotel with up to 500 rooms on 5.5 acres. The amendment would reduce this number to an approximately 152-room hotel on 1.5 acres. The hotel allowed under the Specific Plan description would also be revised from a full-service hotel to a select service hotel providing food service facilities rather than a restaurant and a conference space with theatre-style seating that would accommodate approximately 300 people, banquet-style seating for sit-down events to accommodate approximately 200 people, and ballroom-style arrangements for wedding events to accommodate up to 150 people. The proposed amendments are summarized herein and are available for review at City offices and on the San Bruno Community Development Department website.

The project site, which is located at the intersection of I-380 and El Camino Real, is zoned Planned Development (P-D). The site is designated Visitor Services under the City of San Bruno General Plan and the Specific Plan. The proposed project site encompasses two separate parcels, identified by the San Mateo County Assessor's Office as Assessor Parcel Numbers (APNs): 020-013-250 and 020-013-260, both owned by the City of San Bruno.

B. Project Objectives

CEQA *Guidelines* section 15124(b) requires that the Project Description of an EIR include a statement of objectives for the proposed project. The Project Sponsor, City of San Bruno, seeks to

develop a hotel. The City of San Bruno developed project objectives for the Specific Plan area in the 2001 EIR. The following objectives were selected from that list because the proposed hotel fulfills the Specific Plan objectives, however not all of the original objectives are included here:

- 1) Establish a physical plan for the gradual transition of the Specific Plan area to urban uses near major transportation corridors that support the area's intended transportation/transit role;
- 2) Establish land uses that help assure long-term economic vitality and sustainability for the City;
- 3) Establish policies and guidelines that encourage a comprehensive new development and reuse of the U.S. Navy site to complement and enhance existing uses in a consolidated and more economically efficient land use pattern;
- 4) Implement design and development standards to create a visually attractive gateway development based upon the principles of a pedestrian-friendly, Transit-Oriented Development (TOD);
- 5) Develop job opportunities that are transit accessible;
- 6) Create environmentally sensitive development; and
- 7) Facilitate realistic development that can be expeditiously implemented.

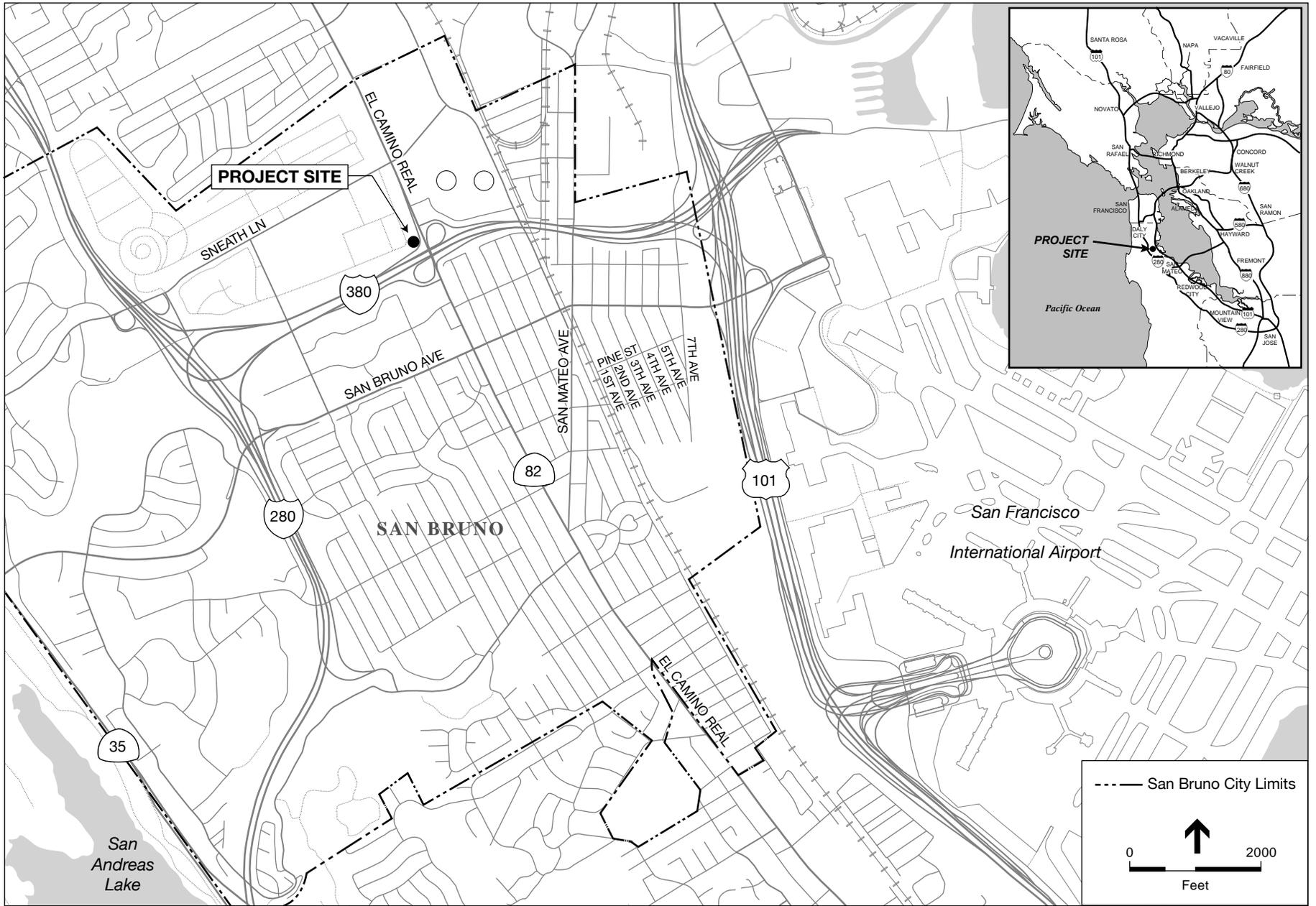
The objectives specific to this project are to:

- 1) Further the goals and policies of the U.S. Navy Specific Plan;
- 2) Develop a hotel that will attract regional, national, and international visitors due to its proximity to San Francisco International Airport, I-380 and US 101; and
- 3) Complement existing retail, recreation and visitor-serving land uses in the vicinity.

C. Project Location and Setting

The project site is located in the northeastern portion of the City of San Bruno, in the vicinity of San Francisco International Airport, Interstate 380 (I-380) and U.S. Highway 101 (**Figure 3-1**). The parcel is bounded by El Camino Real/State Route 82 (SR 82) to the east, I-380 to the south, and The Crossing San Bruno, a multifamily housing development to the north and east. The site is also within walking distance of two commuter-rail transit stations (BART and CalTrain), The Shops at Tanforan, and the Bayhill office park (**Figure 3-2**). The 1.5-acre parcel is currently a vacant lot and enclosed by a chain-link slatted fence. It is adjacent to Jack's restaurant and buildings representing The Crossing development.

The project site resides within the U.S. Navy Site Specific Plan planning area; a 56-acre area that includes a 20-acre decommissioned U.S. Navy Facility (**Figure 3-3**). The hotel site represents the last remaining vacant parcel within The Crossing. The Crossing includes 1,063 multifamily units in five buildings (including 325 affordable units and 228 senior units) and a 12,500 square foot fully occupied commercial center, all built within the past ten years. The San Francisco International



SOURCE: ESA

The Crossing Hotel Site . 130117

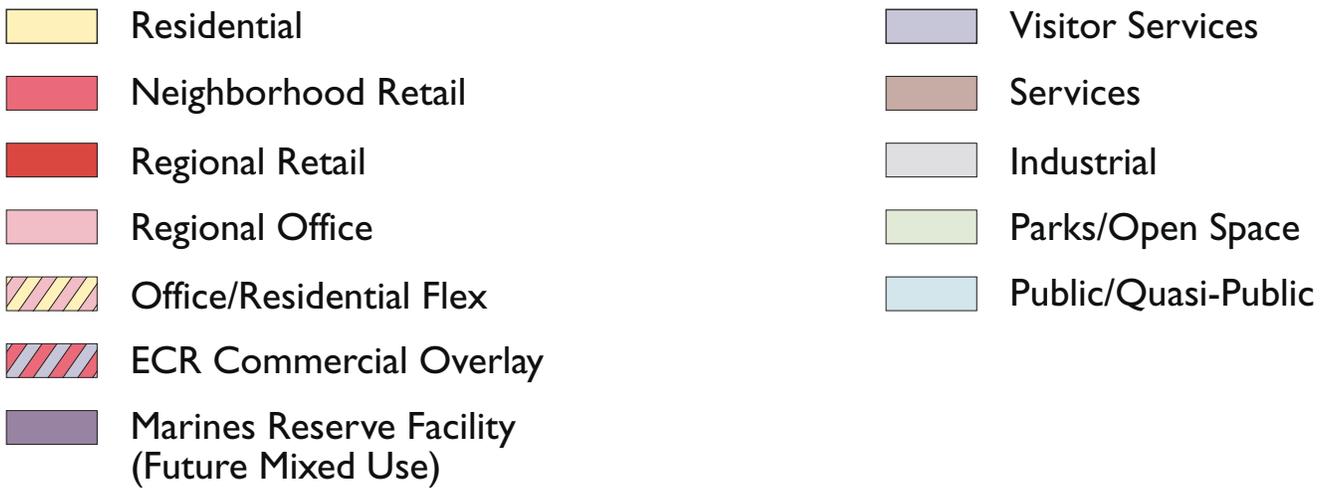
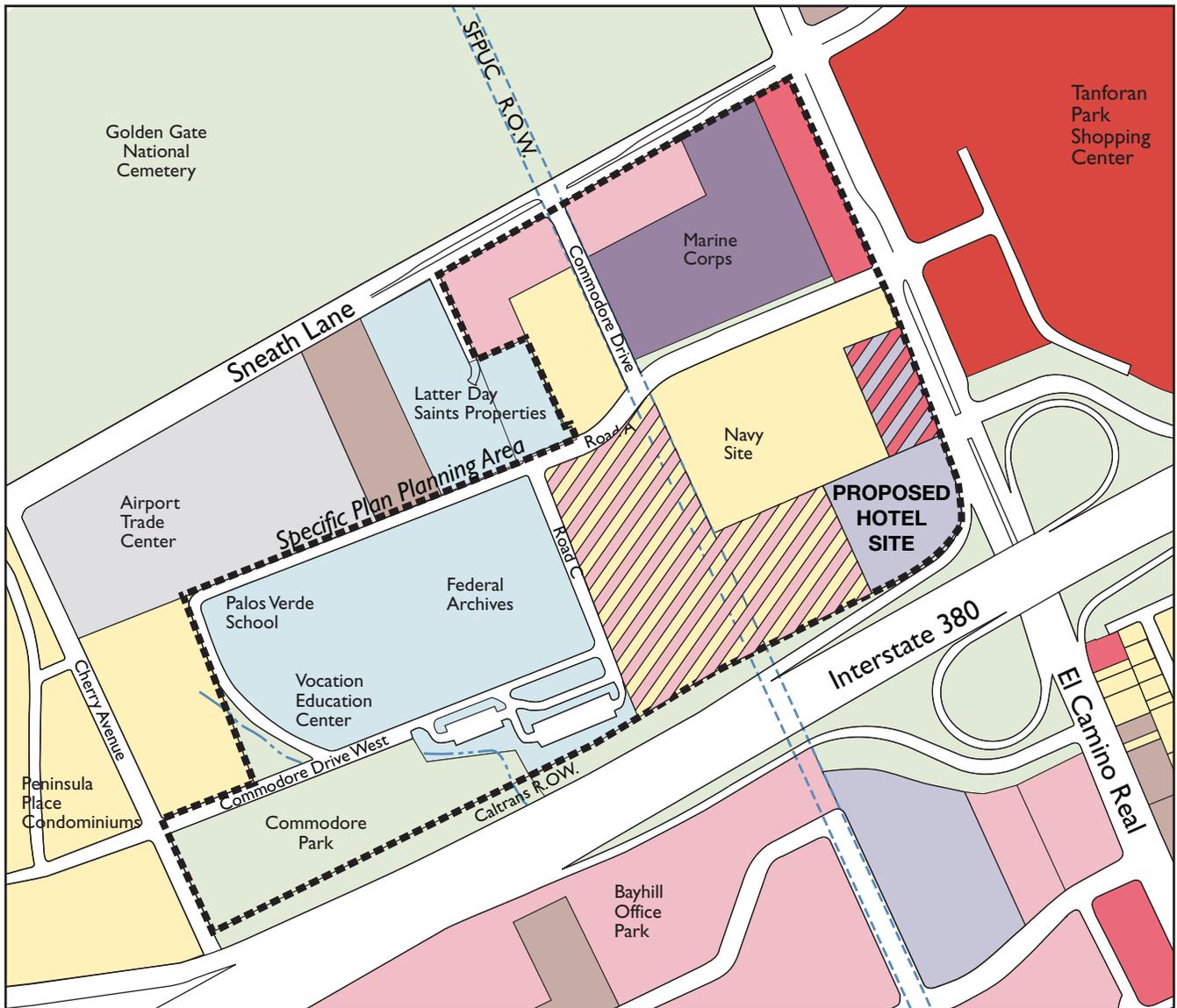
Figure 3-1
Project Location Map



SOURCE: ESA

The Crossing Hotel Site . 130117

Figure 3-2
Hotel Site Overview



Airport is three miles southeast of the project site. Other notable land uses in the vicinity include the Golden Gate National Cemetery, one-half mile to the north of the site and a one million-square-foot regional mall (the Shops at Tanforan) approximately 500 feet to the east.

D. Project Planning Efforts

U.S. Navy Site and Its Environs Specific Plan

This Supplemental EIR has been prepared to evaluate the proposed changes to The Crossing hotel site/project originally presented and evaluated in the *U.S. Navy Site and Its Environs Specific Plan EIR*. In January 2001, the City adopted the *U.S. Navy Site and Its Environs Specific Plan* to provide a planning framework for future growth and redevelopment of a collection of parcels that made up the former U.S. Navy site. The purpose of the Specific Plan was to establish General Plan and Zoning Ordinance policy, standards, and requirements for future development while encouraging economically viable redevelopment of the area with a mix of uses that are sensitive to existing residential neighborhoods and the historic character of the area.

The Specific Plan defined the City's planning and development policies for a 56-acre area generally bounded by Sneath Lane and privately held lands to the north, El Camino Real and Tanforan Park Shopping Center to the east, I-380 and the Bayhill Office complex to the south, and Cherry Avenue and a large portion of a condominium complex. The Crossing project site is located in the southeastern corner of the Planning Area, bounded by El Camino Real and I-380. The Planning Area is presented in Figure 3-3.

The Specific Plan evaluated the proposed hotel site to include a 500-room, seven story hotel on a 5.5 acre site. As described in the Specific Plan (pg. 45):

Hotel and Ancillary Uses (up to 500 rooms): This land use designation centers on a quality "flagship" hotel with a room count up to 500 units. A "flagship" hotel is a full service hotel offering guest rooms for overnight stay, meeting facilities, food services provided by a major operator or "flag" and a variety of personal services offered to hotel guests. As such, it is envisioned that a full service restaurant (approximately 5,000 square feet) will be developed within or adjacent to the hotel along with meeting rooms, banquet and special event facilities.

The plan provides for a maximum height of 90 feet, including elevator penthouse and other ancillary mechanical equipment, which will accommodate up to seven stories of room floors with the lobby, services and public space on the ground floor as well as a potential half level of underground parking. The plan envisions that most of the hotel parking would be provided in a shared parking garage with the adjacent office complex. Due to the height and number of stories, the hotel would be subject to voter approval, as would the parking garage.

Since certification of the Specific Plan EIR in 2001, the entire Planning Area has been built out with commercial and residential with the exception of the 1.5 acre parcel that is proposed for The Crossing Hotel. The hotel site represents the last remaining vacant parcel within The Crossing. Today, The Crossing includes 1,063 multifamily units in five buildings (including 325 affordable

units and 228 senior units) and a 12,500 square foot fully occupied commercial center, all built within the past ten years. The Planning Area land uses and development are described in Section 4, below.

The Specific Plan was amended in 2002 to increase the maximum residential density from 50 dwelling units per acre to 60 units per acre on the former U.S. Navy site, and to create “flex” office/residential sites.

Further, the Specific Plan was amended in 2005 to provide for the El Camino Real (ECR) Commercial Overlay to assure development of significant nonresidential uses vital to achievement of the overall mixed use character and quality of the project.

Amendments to the U.S. Navy Site and Its Environs Specific Plan

Provisions for a hotel development that were included in the Specific Plan allowed for a hotel with up to 500 rooms and up to seven stories (90 feet maximum height), including ground floor lobby and service area, and 15,000 square feet of meeting/retail space. Further, the Specific Plan Amendment would require that the hotel operator be committed to the reduction of long-term operational greenhouse gas emissions to the extent feasible through the implementation of strict control measures.

The proposed project includes several amendments to the Specific Plan that would reduce the scale of the hotel approved in the Specific Plan. These proposed amendments are described below.

Project Characteristics

The Specific Plan allows for a hotel with up to 500 rooms on 5.5 acres. The amendment would reduce this number to a 152-room hotel on 1.5 acres. The hotel would also be revised from a full-service hotel to a select service hotel providing limited food service facilities rather than a full restaurant. The hotel would also include a conference space with theatre-style seating that would accommodate approximately 300 people, banquet-style seating for sit-down events to accommodate approximately 200 people, or ballroom-style arrangements for wedding events to accommodate up to 150 people, depending on configuration for a particular event.

The Specific Plan allows for a building with a maximum height of 90 feet with voter approval. In June 2001 a special election was held following a “Town Hall” meeting, as required under local Ordinance 1284, where voters approved Initiative E, authorizing development of the U.S. Navy Site projects specifically relating to construction of structures more than three stories or 50 feet in height. A maximum height of 90 feet was approved through Measure E; however, under the proposed project, the Specific Plan would be amended such that the maximum building height must not penetrate critical aeronautical surfaces, which would be determined by the Federal Aviation Administration (FAA) in an aeronautical study prepared for a specific project. The

maximum height at The Crossing Hotel site is estimated to be approximately 73 feet, which would allow five stories. This is the height limit proposed under the Specific Plan amendments. Example project site design and renderings are presented in **Figures 3-4** and **3-5**, and were used to conduct the Supplemental EIR analysis.

The Specific Plan is also being amended as part of this project to require The Crossing Hotel project, and operator, to reduce long-term operational greenhouse gas emissions to the extent feasible through the implementation of the following conservation standards:

- Install a minimum of 6,000 square feet of solar photovoltaic panels on the rooftop.
- Improve the building envelope energy efficiency 15% over 2013 Title 24 standards;
- Incorporate high efficiency lighting (such as LEDs, metal halide post top, metal halide cobrahead or cutoff lights, or high pressure sodium cutoff lights) into public areas, such as parking lots, garages, and other exterior areas to achieve at least 15% lighting energy reduction compared to the use of mercury cobrahead lights;
- Install energy efficient appliances that comply with the most recent U.S. EPA Energy Star criteria, including refrigerators, dish washers, fans, and clothes washers;
- Incorporate water conservation strategies, including the installation of low flow faucets, toilets, and showers, as well as water efficient irrigation-systems;
- Institute recycling and composting services in order to achieve at least a 10% reduction in waste disposed.

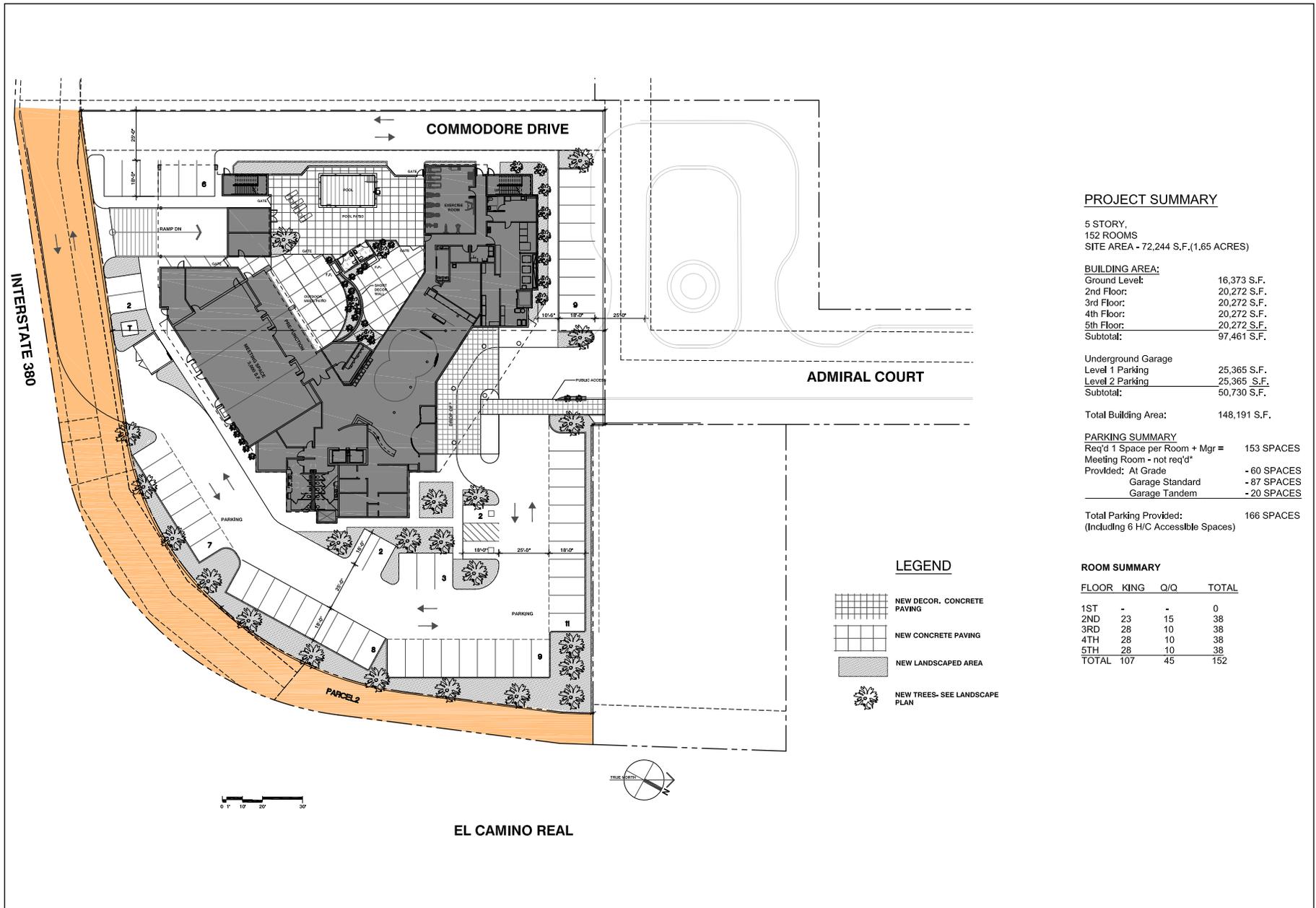
Parking and Circulation

Additional amendments to the Specific Plan regarding parking state that the proposed hotel development must meet the requirements for hotel guest parking onsite rather than in a shared parking garage with the adjacent office complex. However, shared or offsite parking could be negotiated to meet the needs of events in the hotel meeting space. The hotel would also enter into a shared parking agreement with the restaurant located in the adjacent commercial center.

The proposed project would require one parking space per room with a potential 15 percent reduction for shared parking and envisions a parking structure integrated into the main building. Two natural gas-fueled shuttles would be required as part of a transportation demand management (TDM) program to transport hotel patrons to local businesses and to pick up and drop them off at the San Francisco International Airport, the San Bruno Bay Area Rapid Transit (BART) station, and Caltrain Station.

Project Schedule and Construction

For the purpose of the environmental analysis, this Supplemental EIR considers the construction and occupancy of a 152-room hotel as would be allowed under the Specific Plan Amendment. Assumptions about the hotel include a height limit of 73 feet (5-stories) and a parking garage depth of 24 feet. Approximately 22,547 cubic yards (cy) of soil would be exported from the site in 10 cy trucks. This would require approximately 2,255 truckloads, or 4,510 truck round trips.



SOURCE: City of San Bruno

The Crossing Hotel Site . 130117

Figure 3-4
Preliminary Site Plan



View from El Camino Real
Scale: NTS



View from Admiral Ct.
Scale: NTS



View 1st Street W
Scale: NTS

Note: Not final project design.

The proposed project would be constructed over an 18-month period once a hotel operator is identified by the City. Construction-related activities could include disruptions to the circulation system in and around the project site and surroundings, which may include temporary lane closures and sidewalk closures along adjacent streets. Heavy vehicles (i.e., haul [tractor-trailer] trucks, machinery) would access the project site and surroundings, and equipment and materials would need to be staged for construction. Construction equipment to be used include drill rigs, haul trucks, bulldozers, backhoe, concrete truck, concrete pumper, crane, compressors and employee trucks and automobiles.

Vehicular trips would be generated by an estimated 15-20 workers with a maximum of 30-40 during framing. Parking for construction workers would be located onsite; there would be no staging of vehicles or equipment on or along existing roadways.

The work day for construction workers would typically commence at 7:00 a.m. and would end at or prior to 7:00 p.m.; therefore, construction employee-generated trips would not have a significant effect on the traffic operations on the roadway during typical peak commute hours (7:00 a.m. to 9:00 a.m., and 4:00 p.m. to 6:00 p.m.). There would likely be multiple destination for off-haul materials and origins for on-haul materials. Construction workers would also be arriving from different directions. Travel routes for workers, spoils export and material import would be determined in consultation with the City and scheduled to avoid peak traffic periods.

Project Operation

The project would include secure enclosed structures to house recycling and trash containers. The project site would be regularly monitored by hotel landscape/maintenance staff to ensure that trash would not collect outside the refuse structures. During construction and operation, trash and other waste would be regularly collected and properly disposed or recycled by a certified waste management company. During hotel operations, hotel management would contract with a local waste management company to provide collection services.

Water supply from the City of San Bruno is available to the project using existing waterlines. The project would connect to an existing sewer main on site. Stormwater would flow through these filtration systems before it is channeled to the site drainage system.

The hotel would employ approximately 30 workers, 40 percent of which would be full-time.

E. Project Approvals

The project site is located within the City of San Bruno's land jurisdiction; the City of San Bruno (City) is the Lead Agency responsible for certification of the Supplemental Environmental Impact Report and adoption of the Mitigation Monitoring and Reporting Program.

The project would be required to comply with the City of San Bruno's General Plan. The project would comply with the land use classifications for the site as well as density requirements for such uses as specified in the General Plan and the U.S. Navy Site Specific Plan. Project approvals

that may be required for development of the hotel include: Specific Plan Amendment, Planned Development Permit, Architectural Review Permit, Conditional Use Permit, and Development Agreement.

Additionally, the development of a hotel project may require approvals from the following:

- City/County Association of Governments (C/CAG)
- C/CAG Airport Land Use Committee (ALUC)
- Federal Aviation Administration (FAA)
- San Mateo County Department of Environmental Health
- Regional Water Quality Control Board (RWQCB)

CHAPTER 4

Environmental Setting, Impacts, and Mitigation Measures

This chapter contains the analysis of the potential effects to environmental topics considered under CEQA from construction and operation of the reduced-size Crossing Hotel allowed under the project's amendments to the Specific Plan. This chapter describes the existing setting for each topic, the potential impacts that could result from the hotel development and relevant plans and policies that would minimize or avoid potential adverse environmental effects that could result. Finally, this chapter identifies mitigation measures necessary to reduce the potential impacts resulting from hotel development.

The following provides an overview of the scope of the analysis included in this chapter, the organization of the sections, and the methods for determining what impacts are significant.

Environmental Topics

The following Sections in this chapter analyze the environmental topics as listed below and presented in the Table of Contents at the front of this document:

- 4.A Air Quality
- 4.B Greenhouse Gas Emissions
- 4.C Transportation and Circulation

Format of Environmental Topic Sections, Impact Statements, and Mitigation Measures

Each environmental topic section generally includes two main subsections:

- *Existing Setting*, which includes baseline conditions, regulatory setting, Thresholds/Criteria of Significance; and
- *Impacts and Mitigation Measures*, which identifies and discusses the potential impact and mitigation measures that would, to the extent possible, reduce or eliminate adverse impacts identified in this chapter.

This EIR identifies all impacts with an alpha-numeric designation that corresponds to the environmental topic addressed in each section (e.g., “4.A” for Section A, Air Quality). The topic designator is followed by a number that indicates the sequence in which the impact statement occurs within the

section. For example, “Impact 4.A-1” is the first (i.e., “1”) air quality impact identified in the EIR. All impact statements are presented in bold text.

The Impact Classification (discussed below) of the project’s effects prior to implementation of mitigation measures is stated in parentheses immediately following the impact statement.

Similarly, each mitigation measure is numbered to correspond with the impact that it addresses. Where multiple mitigation measures address a single impact, each mitigation measure is numbered sequentially. For example “Mitigation Measure 4.A-1” is the first mitigation identified to address the first air quality impact (i.e., “4.A-1”). All mitigation measure statements are presented in bold text.

Thresholds/Criteria of Significance

The CEQA *Guidelines* § 15382 defines a significant effect on the environment as “*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.*” Determinations of significance vary with the physical conditions affected and the setting in which the change occurs. The significance criteria used in this Supplemental EIR are the thresholds for determining significance of potential impacts and are based on Appendix G of the CEQA *Guidelines*.

Impact Classifications

The following level of significance classifications are used throughout the impact analysis in this EIR¹:

- **Less than Significant (LS)** – The impacts of the proposed project, either before or after implementation of standard conditions of approval and/or feasible mitigation measures, do not reach or exceed the defined Threshold/Criteria of Significance. Generally, no mitigation measure is required for a LS impact.
- **Significant (S)** – The impact of the proposed project is expected to reach or exceed the defined Threshold/Criteria of Significance. Feasible mitigation measures and/or standard conditions of approval may or may not be identified to reduce the significant impact to a less than significant level.
- **No Impact (N)** – No noticeable adverse effect on the environment would occur.

¹ A significant and unavoidable classification is also sometimes necessary when there are no feasible mitigation measures available to reduce an impact to a level of insignificance, but no such classification will result from the proposed project.

Environmental Baseline

Overall, pursuant to CEQA *Guidelines* §15125(a), this EIR measures the physical impacts of the proposed project (i.e., the development on the site as a hotel) against a “baseline” of physical environmental conditions at and in the vicinity of city and the site for the hotel project. The environmental “baseline” is the combined circumstances existing around the time the NOP of the Supplemental EIR was published, which is November 3, 2014.² In most cases, the baseline condition relevant to the environmental topic being analyzed is described within each environmental topic section in this chapter. In some cases (such as Section 4.A, Air Quality), discussion of the baseline condition is detailed or restated in the Impacts Analysis to provide the impact analysis in the most reader-friendly format and organization. The baseline also includes the policy and planning context in which development facilitated by the proposed project is proposed, such as the existing design review policies and procedures that currently govern proposed development.

Cumulative Analysis

Approach to the Cumulative Analysis

CEQA defines cumulative as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impact” (CEQA *Guidelines* Sec. 15355). CEQA *Guidelines* § 15130 requires that an EIR evaluate potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past, present, existing, approved, pending and reasonably foreseeable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts. “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects” (CEQA *Guidelines* Sec. 15355(b)). The City of San Bruno’s analysis approach specifies “past, present, existing, approved, pending and reasonably foreseeable future projects.”

Cumulative Context

The context used for assessing cumulative impacts typically varies depending on the specific topic being analyzed to reflect the different geographic scope of different impact areas. For example, considerations for the cumulative aesthetics focuses on public view corridors and scenic vistas. In assessing air quality impacts, on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions is the best tool for determining the cumulative effect. The cumulative development analysis is intended to capture all of the intersections considered in the traffic analysis for the proposed project. Accordingly, the

² Except as specified otherwise, any reference to “existing” conditions throughout this SEIR refers to the baseline condition as of generally November 3, 2014.

geographic setting and other parameters of each cumulative analysis discussion can vary and are described under their respective cumulative analysis impact in Chapter 4.

Generally, cumulative development beyond the city limits could potentially result in an incremental impact when added to the proposed project. Therefore, the list of known development projects within the city limits was used to identify past, present, existing, approved, pending and reasonably foreseeable future projects. As discussed above, cumulative projects considered in the cumulative context can vary by environmental topic; therefore, some of the list above may not be directly relevant to the cumulative context, depending on the environmental topic.

In some cases, the cumulative context may include more development than the specific known projects. A primary example is the transportation analyses (and transportation-related traffic and air quality), which uses a growth rate to account for background traffic from projects citywide and the broader regional context.

The cumulative discussions in each topical section throughout this Chapter describe the cumulative geographic context considered for each topic at a level appropriate to the analysis presented in this Supplemental EIR.

The proposed project is located in the City of San Bruno, within the U.S. Navy Specific Plan Area, and is the final parcel in the Plan Area to be buildout. Cumulative projects in the project vicinity include the redevelopment of a former sit down restaurant into a new 67,000-square-foot office is in the planning sections at 1250 Grundy Lane (0.25 miles from the project site) and the construction of a three-story mixed-use project with 83 residential units at 406-418 San Mateo Avenue (0.9 miles from the project site). Additionally, the Transit Corridors Plan Area includes downtown San Bruno, historically focused on San Mateo Avenue, as well as adjacent principal streets, including El Camino Real, San Bruno Avenue, and Huntington Avenue. The Transit Corridors Plan objective is to facilitate future improvement of the Transit Corridors Area by establishing a clear vision and development framework, associated development standards and design guidelines for public and private realm improvements, and a combination of related transportation and infrastructure improvements and other implementation strategies.

A. Air Quality

Introduction

This section addresses the impacts of the proposed hotel that could be constructed under the Specific Plan Amendment on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthy pollutant concentrations, including the type and quantity of emissions that would be generated by construction and occupancy of the hotel. The analysis of emissions focuses on whether the proposed project would cause an exceedance of a State or national ambient air quality standard, a health based standard for exposure to toxic air contaminants, or a CEQA threshold proposed by the Bay Area Air Quality Management District (BAAQMD).

The Specific Plan EIR concluded that the Specific Plan would result in potentially significant air quality impacts due to the construction and operation proposed under the Specific Plan. Impact H.1 found that construction-generated dust would result in a significant impact; however, with implementation of **Mitigation Measure H.1.a** (dust abatement) and **Mitigation Measure H.1.b** (control of asbestos in building demolition), this impact was found to be reduced to a less-than-significant level. Impact H.2 identified a significant and unavoidable impact of the Specific Plan on regional air quality due to project operations, specifically with respect to ozone and respirable particulate matter (PM₁₀, which comprises particles 10 microns and less in diameter) concentrations, pollutants for which the Bay Area was designated “nonattainment” under federal and/or State air quality standards. This impact was a function of the fact that, at the time, the BAAQMD 1999 CEQA Guidelines stated that, if a proposed plan would allow for population growth in excess of that assumed in the then-current Clean Air Plan (at that time, the ‘97 *Clean Air Plan*), the Plan would result in a significant impact. Because the Specific Plan EIR found that a portion of the growth permitted by the Specific Plan would exceed that assumed in the Association of Bay Area Governments projections on which the emissions modeling for the ‘97 *Clean Air Plan* was based, the Specific Plan EIR found that this impact would be significant and unavoidable. **Mitigation Measure H.2** addressed operational emissions by requiring that the City ensure the implementation, to the extent feasible, of Transportation Control Measures identified in the ‘97 *Clean Air Plan* in future development to reduce vehicular emissions. Since the Specific Plan EIR was a programmatic analysis, projects proposed within the Specific Plan are subject to a project-level review for air quality impacts, which is included below.

Since publication of the Specific Plan EIR, the BAAQMD has issued new CEQA Air Quality Guidelines (BAAQMD, 2012a). At the time the Specific Plan EIR was published, there was insufficient data on emissions of what is now known as fine particulate matter (PM_{2.5}, or particles 2.5 microns and less in diameter), which is a subset of PM₁₀. Accordingly, this project-specific analysis includes both PM₁₀ and PM_{2.5}. The 2012 BAAQMD Guidelines call for analysis not only of criteria air pollutants, as in the 1999 Guidelines, but also recommend that projects be evaluated for local health risks from emissions of toxic air contaminants (TACs) and PM_{2.5}. Finally, unlike the 1999 Guidelines, the 2012 BAAQMD Guidelines call for analysis of the impacts of emissions of greenhouse gases (GHGs). GHGs emissions are analyzed in Section 4.B of this SEIR.

This project specific review found that diesel particulate matter (DPM), a TAC, from construction activities (off-road equipment and haul trucks¹) could result in the exposure of sensitive receptors to levels that exceed applicable standards, thus resulting in a new significant impact not identified in the Specific Plan EIR. Therefore, based on the relatively close off-site residential uses, new **Mitigation Measure 4.A-3** has been included in order to ensure that DPM emissions would be reduced to the extent feasible and that potential health risk would be less than significant.

Mitigation Measure H.1.b from the Specific Plan EIR would not apply to the proposed project because the proposed project does not entail the demolition of a building.

As described below, with implementation of mitigation measures from the Specific Plan EIR and new **Mitigation Measure 4.A-3**, the proposed project would have less-than-significant impacts to the region's air quality, which is consistent with the Specific Plan EIR. Therefore, the proposed project would not result in any new potentially significant air quality effects that cannot be mitigated to a less-than-significant level with implementation of mitigation measures identified in the Specific Plan EIR and in this analysis. The identified mitigation ensures that there are no new significant impacts that substantially increase in the severity of any previously identified significant air quality impacts.

Environmental Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

Physical Setting

Climate and Meteorology

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The project area is located in the City of San Bruno and is within the boundaries of the San Francisco Bay Area Air Basin (Bay Area). The Bay Area Air Basin encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin and Napa counties, and the southern portions of Solano and Sonoma counties. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the West Coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone and secondary particulates, such as nitrates and sulfates.

¹ Approximately 22,547 cubic yards (cy) of soil would be exported from the site in 10 cubic yard trucks. This would require approximately 2,255 truckloads, or 4,510 truck round trips.

More specifically, the project site lies approximately two miles west of San Francisco Bay in the peninsula climatological subregion. This subregion extends from northwest San Jose to the Golden Gate Bridge. The Santa Cruz Mountains run up the center of the peninsula, with elevations exceeding 2000 feet at the southern end, decreasing to 500 feet in South San Francisco. In this area, marine air traveling through the San Bruno Gap (extending from Fort Funston on the coast to the San Francisco Airport) and the Crystal Springs Gap (between Half Moon Bay and San Carlos) is a dominant weather factor. The air pollution potential in this subregion is highest at the northern end, from motor vehicle congestion, and in the southeast, which is protected from the high winds and fog of the marine layer (BAAQMD, 2012a).

The prevailing winds along the peninsula's coast are from the west, although individual sites can show significant differences as a result of local topographic features. Annual average wind speeds range from 5 to 10 mph throughout the peninsula, with higher wind speeds usually found along the coast. Winds on the eastern side of the peninsula are often high in certain areas, such as near the San Bruno Gap and the Crystal Springs Gap. Cities in the southeastern peninsula experience warmer temperatures and fewer foggy days because the marine layer is blocked by the Santa Cruz Mountains to the west, which also results in variations in summertime maximum temperatures in different parts of the peninsula.

Existing Air Quality

The California Air Resources Board (CARB) and BAAQMD operate a regional monitoring network in the Bay Area that measures the ambient concentrations of the six criteria air pollutants. Existing and probable future levels of air quality in San Bruno can generally be inferred from ambient air quality measurements at the nearby monitoring stations. Since the major pollutants of concern in the San Francisco Bay Area are ozone and particulate matter (PM), **Table 4.A-1** shows a three-year summary of monitoring data (2010 through 2013) for these pollutants from the Arkansas Street station in San Francisco, which is approximately 10 miles northeast of the project site and is the nearest monitoring station to the project site. Due to the proximity of the project site to the monitoring station, these air quality measurements are understood to be generally representative of conditions within the project area. Table 4.A-1 also compares measured pollutant concentrations with State and national ambient air quality standards (see Regulatory Setting below).

Criteria Air Pollutants

Ozone

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_x). ROG and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of

**TABLE 4.A-1
AIR QUALITY DATA SUMMARY (2011-2013) – ARKANSAS STREET STATION**

Pollutant	Monitoring Data by Year		
	2011	2012	2013
Ozone			
Highest 1 Hour Average (ppm) ^b	0.070	0.069	0.069
Days over State Standard (0.09 ppm) ^a	0	0	0
Highest 8 Hour Average (ppm) ^b	0.054	0.049	0.060
Days over National Standard (0.075 ppm) ^a	0	0	0
Days over State Standard (0.07 ppm) ^a	0	0	0
Particulate Matter (PM10)			
Highest 24 Hour Average – State/National (µg/m ³) ^b	45.6/43.7	50.6/48.2	44.3/41.9
Estimated Days over National Standard (150 µg/m ³) ^{a,c}	0	0	NA
Estimated Days over State Standard (50 µg/m ³) ^{a,c}	0	6.0	NA
State Annual Average (State Standard 20 µg/m ³) ^{a,b}	19.5	17.5	NA
Particulate Matter (PM2.5)			
Highest 24 Hour Average (µg/m ³) ^b – National Measurement	47.5	35.7	48.5
Estimated Days over National Standard (35 µg/m ³) ^{a,c}	2.0	1.1	2.0
State Annual Average (12 µg/m ³) ^b	9.5	NA	NA

^a Generally, state standards and national standards are not to be exceeded more than once per year.
^b ppm = parts per million; µg/m³ = micrograms per cubic meter.
^c PM10 and PM2.5 is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.

Values in **bold** exceed the respective air quality standard. NA = Not Available

SOURCE: California Air Resources Board (CARB), 2014. *Summaries of Air Quality Data, 20011-2013*. www.arb.ca.gov/adam/cgi-bin/db2www/polltrends.d2w/start. Accessed October 29, 2014.

sources of ROG and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

Carbon Monoxide (CO)

Ambient carbon monoxide concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence carbon monoxide concentrations. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

Carbon monoxide concentrations have declined dramatically in California due to existing controls and programs and most areas of the state including the project area region have no problem meeting the carbon monoxide state and federal standards. CO measurements and modeling were

important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, fewer emissions from new vehicles, and improvements in fuels. The clear success in reducing CO levels is evident in the first paragraph of the executive summary of the *CARB 2004 Revision to the California State Implementation Plan for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas* (CARB, 2004), shown below:

“The dramatic reduction in carbon monoxide (CO) levels across California is one of the biggest success stories in air pollution control. Air Resources Board (ARB or Board) requirements for cleaner vehicles, equipment and fuels have cut peak CO levels in half since 1980, despite growth. All areas of the State designated as non-attainment for the federal 8-hour CO standard in 1991 now attain the standard, including the Los Angeles urbanized area.”

Nitrogen Dioxide (NO₂)

NO₂ is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Nitrogen dioxide is an air quality concern because it acts as a respiratory irritant and is a precursor of ozone. Nitrogen dioxide is a major component of the group of gaseous nitrogen compounds commonly referred to as nitrogen oxides (NO_x). NO_x is produced by fuel combustion in motor vehicles, industrial stationary sources (such as industrial activities), ships, aircraft, and rail transit. Typically, nitrogen oxides emitted from fuel combustion are in the form of nitric oxide (NO) and nitrogen dioxide (NO₂). NO is often converted to NO₂ when it reacts with ozone or undergoes photochemical reactions in the atmosphere. Therefore, emissions of NO₂ from combustion sources are typically evaluated based on the amount of NO_x emitted from the source.

Sulfur Dioxide (SO₂)

SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of atmospheric sulfate, particulate matter, and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

Particulate Matter (PM)

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

filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fraction, PM₁₀ and PM_{2.5}, is a health concern particularly at levels above the federal and state ambient air quality standards. PM_{2.5} (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus, are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing. Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM₁₀ and PM_{2.5} because their immune and respiratory systems are still developing.

Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health (Dockery and Pope, 2006).

Lead (Pb)

Ambient lead concentrations meet both the federal and state standards in the project area. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline products. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead. Adoption and development under the proposed project would not introduce any new sources of lead emissions; consequently, lead emissions are not required to be quantified and are not further evaluated in this analysis.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

TACs do not have ambient air quality standards, but are regulated by the BAAQMD using a risk-based approach. This approach uses a health risk assessment to determine what sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis of exposure to toxic substances in which human health risks from exposure to toxic substances are estimated, based on the potency of the toxic substances.²

² A health risk assessment is required for permitting approval if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. In these instances, a health risk assessment for the source in question must be prepared. Such an assessment generally evaluates chronic, long-term effects, calculating the increased risk of cancer as a result of exposure to one or more TACs.

Odorous Emissions

Though offensive odors from stationary sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. The BAAQMD CEQA Guidelines recommends that odor impacts be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Generally, increasing the distance between the receptor and the source would mitigate odor impacts.

The BAAQMD provides examples of odor sources which include wastewater treatments plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries and chemical plants.

Sensitive Land Uses

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Land uses such as schools, children's day care centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress and other air quality-related health problems. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions.

BAAQMD specifically defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, colleges and universities, daycares, hospitals, and senior-care facilities. Workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration (OSHA) to ensure the health and well-being of their employees (BAAQMD, 2012b). The project area consists of an existing mix of residential, commercial and office space. The project would not result in the introduction of new sensitive receptors at the site.

The nearest sensitive receptors to the project site are multi-family residences located to the north and west between Admiral Court and National Avenue in The Crossing San Bruno housing development, which includes Village Senior Apartments, located directly adjacent to the project site.

Regulatory Framework for Air Quality

The United States Environmental Protection Agency (U.S. EPA) is responsible for implementing the programs established under the federal Clean Air Act, such as establishing and reviewing the federal ambient air quality standards and judging the adequacy of State Implementation Plans (SIPs). However, the U.S. EPA has delegated the authority to implement many of the federal

programs to the states while retaining an oversight role to ensure that the programs continue to be implemented. In California, CARB is responsible for establishing and reviewing the State ambient air quality standards, developing and managing the California SIP, securing approval of this plan from U.S. EPA, identifying TACs, regulating mobile emissions sources in California, and overseeing the activities of air quality management districts, which are organized at the county or regional level. Air quality management districts, such as the BAAQMD, are primarily responsible for regulating stationary emissions sources at facilities within their geographic areas and for preparing the air quality plans that are required under the federal and State Clean Air Acts.

Federal

The Federal Clean Air Act requires the U.S. EPA to identify National Ambient Air Quality Standards (NAAQS or “national standards”) to protect public health and welfare. National standards have been established for ozone, CO, NO₂, sulfur dioxide, respirable particulate matter (PM₁₀ and PM_{2.5}), and lead. **Table 4.A-2** shows current national and State ambient air quality standards, as well as the Bay Area attainment status and common sources for each pollutant.

Pursuant to the 1990 Federal Clean Air Act amendments, the U.S. EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the national standards had been achieved. Table 4.A-2 shows the current attainment status for the State and the Bay Area Air Basin.

The Federal Clean Air Act requires each state to prepare an air quality control plan referred to as the SIP. The Federal Clean Air Act amendments added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has responsibility to review all SIPs to determine if they conform to the mandates of the Federal Clean Air Act amendments and will achieve air quality goals when implemented. If the U.S. EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures. Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Regulation of TACs, termed Hazardous Air Pollutants (HAPs) under federal regulations, is achieved through federal, state and local controls on individual sources. The 1977 Federal Clean Air Act amendments required the U.S. EPA to identify National Emission Standards for HAPs to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals.

**TABLE 4.A-2
AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS**

Pollutant	Averaging Time	State Standard	Bay Area Attainment Status for California Standard	Federal Primary Standard	Bay Area Attainment Status for Federal Standard	Major Pollutant Sources
Ozone	8 hour	0.070 ppm	Non-Attainment	0.075 ppm	Non-Attainment	Formed when ROG and NOx react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment.
	1 hour	0.090 ppm	Non-Attainment	---	---	
Carbon Monoxide	8 hour	9.0 ppm	Attainment	9.0 ppm	Attainment	Internal combustion engines, primarily gasoline-powered motor vehicles
	1 Hour	20 ppm	Attainment	35 ppm	Attainment	
Nitrogen Dioxide	Annual Average	0.030 ppm	---	0.053 ppm	Attainment	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads
	1 Hour	0.180 ppm	Attainment	0.100 ppm	Unclassified	
Sulfur Dioxide	Annual Average	---	---	0.03 ppm	Attainment	Fuel combustion, chemical plants, sulfur recovery plants and metal processing
	24 Hour	0.04 ppm	Attainment	0.14 ppm	Attainment	
	1 Hour	0.25 ppm	Attainment	0.075 ppm	Attainment	
Particulate Matter (PM10)	Annual Arithmetic Mean	20 µg/m3	Non-Attainment	---	---	Dust- and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays)
	24 hour	50 µg/m3	Non-Attainment	150 µg/m3	Unclassified	
Particulate Matter (PM2.5)	Annual Arithmetic Mean	12 µg/m3	Non-Attainment	15 µg/m3	Attainment	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.
	24 hour	---	---	35 µg/m3	Non-Attainment	
Lead	Calendar Quarter	---	---	1.5 µg/m3	Attainment	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	30 Day Average	1.5 µg/m3	Attainment	---	---	
Hydrogen Sulfide	1 hour	0.03 ppm	Unclassified	No Federal Standard	---	Geothermal Power Plants, Petroleum Production and refining

SOURCE: Bay Area Air Quality Management District (BAAQMD), 2014. Air Quality Standards and Attainment Status. Available at: http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm. Accessed October 29, 2014; California Air Resources Board (CARB), 2009. *ARB Fact Sheet: Air Pollution Sources, Effects and Control*. <http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm>. Page last reviewed by CARB December 2009.

State

CARB manages air quality, regulates mobile emissions sources, and oversees the activities of county Air Pollution Control Districts and regional Air Quality Management Districts. CARB establishes State ambient air quality standards and vehicle emissions standards. California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. California has air quality standards for some pollutants for which there is no corresponding national standard. These are shown in Table 4.A-2. Under the California Clean Air Act (which is patterned after the Federal Clean Air Act), areas have been designated as attainment or nonattainment with respect to the State standards. Table 4.A-2 summarizes the Bay Area's attainment status with regard to California standards.

The Health and Safety Code defines TACs as air pollutants which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). A total of 243 substances have been designated TACs under California law; they include the 189 (federal) Hazardous Air Pollutants adopted in accordance with AB 2728. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. Toxic air contaminant emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings.

In August of 1998, CARB identified DPM as a TAC. CARB subsequently developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (CARB, 2000). The document contains proposals to reduce diesel particulate emissions, with the goal of reducing emissions and associated health risks by 75 percent by 2010 and by 85 percent by 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra low sulfur diesel fuel on diesel-fueled engines.

In April 2005, CARB published *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005). This handbook is intended to give guidance to local governments in the siting of sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, near sources of air pollution.

Regional

Air Quality Plans

The 1977 Federal Clean Air Act amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM

standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment in order to ensure continued attainment of the standards. Air quality plans developed to meet federal requirements are referred to as SIPs, discussed above.

Bay Area plans are prepared with the cooperation of the BAAQMD, Metropolitan Transportation Commission (MTC), and the Association of Bay Area Governments (ABAG). On September 15, 2010, the BAAQMD adopted the most recent revision to the Clean Air Plan (CAP) – the *Bay Area 2010 Clean Air Plan* (BAAQMD, 2010). The 2010 CAP serves to:

- Update the *Bay Area 2005 Ozone Strategy* in accordance with the requirements of the California Clean Air Act to implement “all feasible measures” to reduce ozone;
- Consider the impacts of ozone control measures on particulate matter, air toxics, and greenhouse gases in a single, integrated plan;
- Review progress in improving air quality in recent years; and
- Establish emission control measures to be adopted or implemented in the 2010 – 2012 timeframe.

BAAQMD Rules, Regulations, and CEQA Guidelines

The BAAQMD is the regional agency responsible for rulemaking, permitting, and enforcement activities affecting stationary sources in the Bay Area. BAAQMD does not have authority to regulate emissions from motor vehicles. Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various stationary sources, and identify specific pollution reduction measures that must be implemented in association with various activities. These rules regulate not only emissions of the six criteria air pollutants, but also TAC emissions sources subject to these rules are regulated through the BAAQMD’s permitting process and standards of operation. Through this permitting process, including an annual permit review, the BAAQMD monitors generation of stationary emissions and uses this information in developing its air quality plans. Any sources of stationary emissions constructed as part of the Project would be subject to the BAAQMD Rules and Regulations. Both federal and State ozone plans rely heavily upon stationary source control measures set forth in BAAQMD’s Rules and Regulations.

With respect to construction activities associated with Project development, applicable BAAQMD regulations would relate to portable equipment (e.g., concrete batch plants, and gasoline- or diesel-powered engines used for power generation, pumps, compressors, pile drivers, and cranes), architectural coatings, and paving materials. Equipment used during Project construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts).

BAAQMD adopted updated *CEQA Air Quality Guidelines*, including new thresholds of significance in June 2010, and revised them in May 2011 (BAAQMD, 2012a). The Air Quality

Guidelines advise lead agencies on how to evaluate potential air quality impacts, including establishing quantitative and qualitative thresholds of significance. The thresholds BAAQMD adopted were set aside by an Alameda County Superior Court ruling in March 2012. In May 2012, BAAQMD updated its CEQA Air Quality Guidelines to continue to provide direction on recommended analysis methodologies, but without recommended quantitative significance thresholds. In August 2013, the First District Court of Appeal reversed the Superior Court judgment and upheld the BAAQMD's CEQA thresholds. This case is now pending before the California Supreme Court, and BAAQMD has not formally re-instated the thresholds.

The air quality impact analysis in this EIR uses the previously-adopted thresholds and methodologies from the 2011 BAAQMD *CEQA Air Quality Guidelines* to determine the potential impacts of the Project. While the significance thresholds adopted by BAAQMD in 2011 are not currently recommended by the BAAQMD, these thresholds are based on substantial evidence identified in BAAQMD's 2009 *Justification Report* (BAAQMD, 2009) and are therefore used within this document.

Local

City of San Bruno General Plan

The Environmental Resources and Conservation Element of the San Bruno General Plan contains the following Air Quality objective and policies that would apply to the adoption and development under the Specific Plan (City of San Bruno, 2009) include:

- **ERC-25:** Maintain and improve air quality by requiring project mitigation, such as Transportation Demand Management (TDM) techniques, where air quality impacts are unavoidable.
- **ERC-26:** Require dust abatement actions for all new construction and redevelopment projects.
- **ERC-28:** Incorporate air quality beneficial programs and policies into local planning and development activities, with a particular focus on subdivision, zoning, and site design measures that reduce the number and length of single-occupant automobile trips.
- **ERC-33:** Require all large construction projects to mitigate diesel exhaust emissions through use of alternate fuels and control devices.
- **ERC-34:** Require that adequate buffer distances be provided between odor sources and sensitive receptors, such as schools, hospitals, and community centers.

Impacts and Mitigation Measures

This analysis evaluates the proposed project's impacts related to air quality. The evaluation considered project plans, Appendix G of the State CEQA *Guidelines*, current conditions at the project site, and applicable regulations and guidelines.

Significance Criteria – Air Quality

In accordance with Appendix G of the state CEQA *Guidelines*, the impact of the proposed project on air quality or climate change would be considered significant if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any nonattainment pollutant;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The following Appendix G criterion of the State CEQA *Guidelines* is not considered relevant to the project based upon the proposed project plans and data research; therefore, it will not be evaluated further in this EIR:

Creation of objectionable odors: The project would not involve the development of the types of land uses typically associated with odor issues, such as wastewater treatment plants, landfills, composting facilities, refineries, or chemical plants. Nor would the project locate sensitive receptors within proximity of these types of odor-producing sources.

Assessment Methodology

Approach to Analysis – Criteria Air Pollutants

Potential impacts are assessed by modeling the estimated daily emissions generated by project construction and project operations using the CalEEMod land use emissions model version 2013.2. Project emissions are then compared to the significance criteria in the BAAQMD's 2009 *Justification Report* (BAAQMD, 2009), which include the following:

- Result in total construction emissions of Reactive Organic Gases (ROG), NO_x, or PM_{2.5} (exhaust) of 10 tons per year or greater or 54 pounds per day or greater.
- Exceed a construction emission threshold for PM₁₀ (exhaust) of 15 tons per year or greater, or 82 pounds per day or greater.
- For PM₁₀ and PM_{2.5} as part of fugitive dust generated during construction, the BAAQMD Guidelines specify compliance with Best Management Practices as the threshold.
- Result in total operational emissions of ROG, NO_x, or PM_{2.5} of 10 tons per year or greater, or 54 pounds per day or greater.
- Exceed an operational emission threshold for PM₁₀ of 15 tons per year or greater, or 82 pounds per day.
- Result in CO concentrations of 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average) as estimated by roadway vehicle volumes exceeding 44,000 vehicles per hour at any intersection.

- For risks and hazards during construction and operations, result in an increase in cancer risk exposure by 10 in one million, contribute hazard indices by a ratio of 1.0, or increase local concentrations of PM2.5 by 0.3 micrograms per cubic meter.

Cumulative Approach

If the project's impact individually would be significant (i.e., if it exceeds the BAAQMD's quantitative thresholds), that project would also have a cumulative significant air quality impact. A project would also have a cumulative significant impact if the effects from the project, along with other relevant projects, would be significant and the project would contribute considerably to this cumulative significant effect.

With regard to cumulative impacts from PM2.5, a significant cumulative air quality impact would be considered to occur if localized annual average concentrations of PM2.5 would exceed 0.8 micrograms per cubic meter at any receptor from project operations in addition to existing emission sources and cumulative emissions sources within a 1,000-foot radius of the property line of the source or receptor.

With regard to cumulative impacts from toxic air contaminants (TACs), a significant cumulative air quality impact would be considered to occur if the probability of contracting cancer for the MEI would exceed 100 in one million or if the project would expose persons to TACs such that a non-cancer chronic Hazard Index of 10.0 would be exceeded at any receptor as a result of project operations, in addition to existing emission sources and cumulative emissions sources within a 1,000 foot radius of the project site. However, a project's construction or operational impacts would also be considered to result in a considerable contribution to an identified cumulative health risk impact if the project's construction or operation activities would exceed the project-level health risk significance thresholds identified above.

Impact Analysis

Impact 4.A-1: The proposed project could potentially conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

For air quality plan consistency determinations, the BAAQMD recommends that agencies analyze the proposed project with respect to the following questions: (1) does the project support the primary goals of the air quality plan; (2) does the project include applicable control measures from the air quality plan; and (3) does the project not disrupt or hinder implementation of any 2010 CAP control measures? The questions are assessed below. If all the questions are concluded in the affirmative, BAAQMD considers the project consistent with air quality plans prepared for the Bay Area (BAAQMD, 2009). Any project that would not support the 2010 CAP goals would not be considered consistent with the 2010 CAP, and if approval of the proposed project would not result in significant and unavoidable air quality impacts after the application of mitigation, then the proposed project would be considered consistent with the 2010 CAP.

- (1) As presented in the subsequent impact discussions, proposed project-related construction and operation emissions would not exceed the identified significance thresholds; therefore, the proposed project would support the primary goals of the 2010 CAP.
- (2) As mentioned above, projects that incorporate all feasible air quality plan control measures are considered consistent with the 2010 CAP.

The 2010 CAP contains 55 control measures aimed at reducing air pollution in the Bay Area. Most of these measures are not applicable to individual development projects: several are applicable only to stationary sources (generally, industrial facilities) or vehicle fleets, while others call for increased public transit and improving efficiency of roadway networks, while other measures are concerned with health risk reduction, particularly in adversely affected communities. Projects that incorporate all feasible air quality plan control measures are considered consistent with the CAP. The proposed project could facilitate the construction of a new 152-room hotel, which would be required to comply with applicable measures for this type and size of project, including

- Natural gas shuttles: MSM A-1, A-3, TCM C-3
- Highly energy-efficient building: ECM 1

It is noted that the previously developed portion of the Specific Plan is within approximately 0.5 miles of the San Bruno BART Station and 1 mile of the San Bruno Caltrain station, and is adjacent to El Camino Real, where SamTrans operates bus service. The existing multi-family residential buildings are also connected by walking paths and sidewalks. Therefore, the Specific Plan area as currently developed is consistent with TCM D-3 (Local Land Use Strategies), which calls for “land use patterns, policies, and infrastructure investments that support higher density mixed-use, residential and employment development near transit in order to facilitate walking, bicycling and transit use.” The Specific Plan area is also consistent with TCM D-2 (Pedestrian Access and Facilities Improvements).

- (3) Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements. The proposed project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area and therefore would not hinder implementation of 2010 CAP control measures.

The proposed project would support the primary goals of the 2010 CAP and it would not disrupt or hinder implementation of any 2010 CAP control measures.

As noted in the introduction to this Section, the Specific Plan EIR identified a significant and unavoidable impact because Specific Plan growth would exceed that anticipated in the then-current '97 *Clean Air Plan*. Current BAAQMD guidance states that “if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project would be considered consistent with the 2010 [Clean Air Plan].” Given the foregoing, and as will be indicated in the discussion of the following impacts, the proposed project would not result in significant and unavoidable air quality impacts. Consequently, based on BAAQMD guidance, the project may also be considered consistent with the 2010 CAP, and the proposed project would result in a less-than-significant impact with respect to consistency with the applicable air quality plan.

Mitigation Measure H.2 from the Specific Plan EIR identified implementation of additional air quality control measures, as feasible, in individual development within the Specific Plan area. As noted above, the hotel permitted under the Specific Plan Amendment would implement several measures from the *2010 Clean Air Plan*, and most other measures would not be applicable to the proposed project. Accordingly, Mitigation Measure H.2 would not apply to the proposed project.

Significance after Mitigation: The proposed amendment would not increase the severity of the previously identified significant effect, and the proposed project would not make a considerable contribution to regional emissions of ozone precursors or particulate matter, or any other criteria air pollutants.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.A-2: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation. (Significant)

Construction

Criteria pollutant and precursor exhaust emissions of reactive organic gases (ROG), nitrogen oxides (NO_x), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) from construction equipment and vehicles would incrementally add to the regional atmospheric loading of these pollutants during construction of the proposed project. Impacts related to the proposed project contributing to an existing or projected air quality violation are judged by comparing estimated direct and indirect project exhaust emissions to the significance thresholds, which for short-term construction emissions are 54 pounds per day for ROG, NO_x, and PM_{2.5}; and 82 pounds per day for PM₁₀.

BAAQMD recommends that analyses focus on implementation of dust control measures rather than comparing estimated levels of fugitive dust to a quantitative significance threshold. Accordingly, BAAQMD considers implementation of BAAQMD-recommended basic mitigation measures for fugitive dust sufficient to ensure that construction-related fugitive dust is reduced to a less-than-significant level.

Precise details of construction are unknown at this time; therefore, construction emissions were estimated using the default assumptions (i.e., construction fleet activities) included in the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Construction was assumed for a duration of approximately 18 months (396 construction days at an average of 22 work days per month) in the years 2015 and 2016. Approximately 22,547 cubic yards of soil was assumed to be excavated and hauled off-site in order to construct the subterranean garage, resulting in approximately 2,255 truckloads, or 4,510 truck round trips. Average daily criteria air pollutant

emissions from project construction are shown in **Table 4.A-3**.³ Additional assumptions and information are included in the Appendix D.

**TABLE 4.A-3
AVERAGE DAILY CONSTRUCTION-RELATED POLLUTANT EMISSIONS (pounds/day)**

Year	ROG	NOx	Exhaust PM10 ^a	Exhaust PM2.5 ^a
Unmitigated Emissions	7.7	25.2	1.4	1.4
<i>BAAQMD Construction Threshold</i>	54	54	82	54
Significant Impact?	No	No	No	No

^a BAAQMD's proposed construction-related significance thresholds for PM10 and PM2.5 apply to exhaust emissions only and not to fugitive dust.

Although the project would not generate emissions during construction that would exceed the BAAQMD thresholds, due to the non-attainment status of the air basin with respect to ozone, PM10, and PM2.5, the BAAQMD recommends that projects implement a set of Basic Construction Mitigation Measures as best management practices regardless of the significance determination. Incorporation of the Specific Plan EIR **Mitigation Measure H.1.a** (and modified as shown by underline and ~~strikeouts~~) would reduce impacts to less than significant levels.

Operation

Operational emissions, including mobile, energy, and area (i.e., architectural coating, consumer products, landscape equipment) sources were estimated using CalEEMod and are depicted below. Additional assumptions and information are included in the Appendix D. As shown below in **Table 4.A-4**, long-term operational emissions of the project would be less than significant.

**TABLE 4.A-4
OPERATION-RELATED POLLUTANT EMISSIONS (pounds/day)^a**

Year	ROG	NOx	PM10	PM2.5
Operational Emissions	7.0	6.1	3.9	1.1
<i>BAAQMD Operational Threshold</i>	54	54	82	54
Significant Impact?	No	No	No	No

^a Emissions were modeled using CalEEMod for the Winter scenario since they were slightly greater than Summer. Additional information is included in Appendix D.

Mitigation Measure H.1.a: The City shall condition approval of individual development proposals under the Specific Plan on implementation of an appropriate dust abatement program, patterned after the BAAQMD approach described herein. The following will be required for all construction activities within the project area. These measures will reduce fugitive dust emissions primarily during soil movement and grading activities, but also during vehicle and equipment movement on unpaved project sites:

³ Per the BAAQMD's *CEQA Air Quality Guidelines*, daily thresholds of significance for construction are based on average daily emissions.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

The revisions to Specific Plan EIR Mitigation Measure H.1.a are not “considerably different” from the mitigation measure in the Specific Plan EIR, within the meaning of CEQA *Guidelines* Section 15162(a)(3)(D), as the edits simply provide the current dust abatement Best Management Practices (BMPs), as recommended by BAAQMD.

The Specific Plan EIR included a qualitative programmatic analysis for cumulative emissions and deemed the impact significant and unavoidable. This project-level analysis shows that the effects of the proposed project would not increase the severity of previously identified significant effects or introduce a new significant environmental effect.

Significance after Mitigation: The proposed amendment would not increase the severity of the previously identified significant effect. The proposed project would not make a considerable contribution to the programmatic finding of significant and unavoidable impact.

Comparison to 2001 EIR Findings: Mitigation Measures in the Prior EIR Adequately Address Impacts.

Impact 4.A-3: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially expose sensitive receptors to substantial pollutant concentrations. (Significant)

BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, colleges and universities, daycares, hospitals, and senior-care facilities. Workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration (OSHA) to ensure the health and well-being of their employees.

Project construction activities would produce DPM and PM2.5 emissions due to diesel-powered construction equipment such as loaders, backhoes, and haul truck trips. These emissions could result in elevated concentrations of DPM and PM2.5 at nearby receptors. These elevated concentrations could lead to an increase in the risk of cancer or other health impacts. Consequently, a health risk assessment was performed to determine the extent of increased cancer risks and hazard indices at the maximally exposed receptors. The health risk assessment was based on recommended methodology of the California Office of Environmental Health Hazard Assessment (OEHHA) within the California Environmental Protection Agency and adopted by BAAQMD. The cancer risk to residential receptors assumes exposure would occur 9 hours per day, five days per week, to account for the active construction duration. Additionally, cancer risk estimates also incorporate new age sensitivity factors and daily breathing rates recommended by OEHHA (2012). This approach provides updated calculation procedures of the BAAQMD that factor in the increased susceptibility of infants and children to carcinogens as compared to adults.

The maximally exposed receptors would be multifamily residences to the west and adjacent to the construction site. The ISCST3 model was used⁴ to estimate maximum concentrations and potential health risk at sensitive receptors resulting from construction activities, which are shown in **Table 4.A-5** below.

**TABLE 4.A-5
CONSTRUCTION-RELATED HEALTH IMPACTS^{a,b}**

Maximally Exposed Individual	Cancer Risk (persons per million)	Chronic Impact (Hazard Index)	PM2.5 Concentration (µg/m3)
Unmitigated Construction – Residence	28.3	0.008	<0.2
<i>BAAQMD Significance Criteria</i>	10	1	0.3
Significant Impact?	Yes	No	No
Mitigated Construction – Residence	4.3	0.001	<0.03
<i>BAAQMD Significance Criteria</i>	10	1	0.3
Significant Impact?	No	No	No

^a Detailed results of the HRA are included in Appendix D. Notably, mitigation includes incorporation of Level 3 Verified Diesel Emissions Control (VDEC), which would reduce diesel particulate emissions by at least 85 percent.
^b Only chronic impacts are shown since DPM has not been associated with acute health risks.

⁴ The ISCST3 model was used in lieu of AERMOD since meteorological data was only available for ISCST.

As shown in Table 4.A-5, the incremental cancer risk at the maximum exposed residential receptor of 28 in one million (conservatively assuming child risk) would exceed the significance threshold of 10 in a million without mitigation. Therefore, **New Mitigation Measure 4.A-3** requires the installation of Level 3 Verified Diesel Emissions Control filters that would reduce DPM from off-road diesel equipment by at least 85 percent (CARB, 2015). Implementation of this measure would ensure that DPM emissions would be reduced to the extent feasible. With incorporation of this mitigation, the project would result in a maximum incremental cancer risk of 4 in one million. The unmitigated and mitigated maximum chronic HI would be 0.008 and 0.001 at the MEI, respectively, which would be below the significance threshold of 1. Finally, the maximum annual PM_{2.5} unmitigated and mitigated concentrations would be less than 0.2 µg/m³ and 0.03 µg/m³, respectively, which is below the significance threshold of 0.3 µg/m³. Therefore, health risk impacts associated with construction of the hotel allowed under the Specific Plan Amendment would be less than significant after mitigation.

The long-term operation of the proposed project would not result in any sources of toxic air emissions. The major sources of TACs in the vicinity of the project would be from traffic on I-380 and SR 82 (El Camino Real). Patrons of the hotel would not be exposed to long-term TACs due to the transient nature of the land use. Operation of the project would result in less-than-significant exposure and risk to adjacent residences and hotel patrons.

New Mitigation Measure 4.A-3: The project sponsor shall ensure that construction contract specifications include a requirement that all off-road diesel-powered construction equipment used for project improvements be equipped with engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 2 off-road emission standards, and are fitted with Level 3 Verified Diesel Emissions Control (VDEC), which would reduce diesel particulate emissions by at least 85 percent. (Engines meeting Tier 4 [Interim or Final] emission standards automatically meet the Level 3 VDEC requirement and no additional emissions control is required.)

Significance after Mitigation: Less than Significant. Implementation of Mitigation Measure 4.A-3 would reduce DPM emissions to the maximum feasible extent, and would reduce the health risk associated with exposure of nearby residents to DPM during construction to a less-than-significant level.

Comparison to 2001 EIR Findings: New Information Showing New or More Severe Impacts or Newly Feasible or Different Mitigation Measures or Alternatives; however, the analysis in this Supplemental EIR concludes that this newly identified impact would be less than significant with implementation of Mitigation Measure 4.A-3.

Cumulative Impacts

Impact 4.A-4: The construction and operation of a hotel allowed under the Specific Plan Amendment could potentially contribute to a cumulative air quality impact in which the project region is non-attainment. (Less than Significant)

According to the BAAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In addition, according to the BAAQMD CEQA Air Quality Guidelines, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2009). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. As discussed in Impact 4.A-2 above, the proposed project would result in less than significant regional emissions from project operations and therefore would also not make a cumulatively considerable contribution to regional air quality impacts. The Specific Plan included a qualitative programmatic analysis for cumulative emissions and deemed the impact significant and unavoidable. However, this project-level analysis shows that the effects of the proposed project would not increase the severity of previously identified significant effects or introduce a new significant environmental effect (see Impact 4.A-2 above).

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.A-5: Construction of a hotel allowed under the Specific Plan Amendment could potentially contribute to a cumulative health risk impacts during construction. (Significant)

With regard to the potential for the proposed project to contribute to more localized cumulative health risk from emissions of TACs, Chapter 6 of this Supplemental EIR identifies other recent and current projects. BAAQMD recommends identifying sites within 1,000 feet for assessment of localized impacts. Other projects within 1,000 feet of the project site include:

- Transit Corridors Plan, which includes San Mateo Avenue, El Camino Real, San Bruno Avenue, and Huntington Avenue.

As noted in the discussion of Impacts 4.A-2 and 4.A-3, during project construction TAC emissions (DPM and PM 2.5) would result from use of diesel-powered construction equipment and would result in potentially significant health risk impacts based on the close proximity to off-site residential uses. **New Mitigation Measure 4.A-3** has been included in order to ensure that TAC emissions would be reduced to the extent feasible and that potential health risk would be less than significant. During project operations there would be no stationary sources of DPM or PM 2.5). The cumulative project listed above is intended to facilitate improvement of the Transit Corridors Area. It is unknown if and when construction activities would occur under the Transit Corridors Plan within 1,000 feet of the project and whether construction equipment would contribute to localized concentrations of construction-related DPM or PM 2.5 from the proposed project. However, construction projects in close proximity to sensitive receptors within the BAAQMD jurisdiction are required to assess potential health risk impacts and mitigate

appropriately, similar to the proposed project. Therefore, there would be a less-than-significant cumulative impact from the proposed construction activities from the proposed project, along with other cumulative projects in the area.

Mitigation: Implement New Mitigation Measure 4.A-3.

Significance after Mitigation: Less than Significant.

Comparison to 2001 EIR Findings: New Information Showing New or More Severe Impacts or Newly Feasible or Different Mitigation Measures or Alternatives; however, the analysis in this Supplemental EIR concludes that this newly identified impact would be less than significant with implementation of Mitigation Measure 4.A-3.

References

- Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report, CEQA Thresholds of Significance Air Quality Guidelines, October 2009. Available at www.baaqmd.gov.
- BAAQMD, 2010. Bay Area 2010 Clean Air Plan, September 15, 2010.
- BAAQMD, 2012a. CEQA Air Quality Guidelines. Adopted June 2011, updated May 2012. Available at www.baaqmd.gov.
- Bay Area Air Quality Management District (BAAQMD), 2012b, Recommended Methods for Screening and Modeling Local Risks and Hazards, May 2012.
- BAAQMD, 2014. Air Quality Standards and Attainment Status. Available at: http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm. Accessed October 29, 2014.
- California Air Resource Board (CARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October 2000.
- CARB, 2004. 2004 Revisions to the California State Implementation Plan for Carbon Monoxide. July 22, 2004.
- CARB, 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005.
- CARB, 2009. ARB Fact Sheet: Air Pollution Sources, Effects and Control. <http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm>. Page last reviewed by CARB December 2009.
- CARB, 2014. Summaries of Air Quality Data, 20011-2013. www.arb.ca.gov/adam/cgi-bin/db2www/polltrends.d2w/start. Accessed October 29, 2014.
- CARB, 2015. Verification Procedure – Currently Verified. <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>. Page last reviewed January 7, 2015.
- City of San Bruno, 2009. San Bruno General Plan. March 24, 2009.
- Dockery, D. W., and Pope, C.A., III. 2006. “Health Effects of Fine Particulate Air Pollution: Lines that Connect.” *Journal Air & Waste Management Association*, pp. 30-37. June 2006.

B. Climate Change and Greenhouse Gas Emissions

Introduction

This section presents an overview of global and local climate change, and examines the potential for the proposed project to result in increased greenhouse gas (GHG) emissions, which contribute to climate change. The impact analysis also includes an evaluation of the consistency of the proposed project with statewide and local planning efforts to reduce GHG emissions.

Importantly, GHGs were not analyzed in the Specific Plan EIR (2001) and were not commonly analyzed in CEQA documents at the time the Specific Plan EIR was prepared and adopted. In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05, which led to a formal analysis of GHGs. However, information about GHGs could have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was adopted.¹

Further, a change in significance thresholds does not qualify as "significant new information," as it does not show that the physical impact the proposed project will have on the environment has changed. The physical impacts of the proposed project are incrementally less than the project that was considered in the Specific Plan EIR; this Specific Plan Amendment reduces the proposed hotel from 500 rooms to 152 rooms. So, although this analysis presents the proposed project's physical impacts related to GHG, the physical impacts of the project are less than what was considered in the Specific Plan.²

However, the proposed Specific Plan Amendment would allow for the construction of a 152-room hotel. The impact analysis presented in this section evaluates the construction and operation of the hotel related to GHGs. The results of the analysis found that the proposed hotel would exceed the recommended thresholds for GHGs. However, because this would not be considered a new significant physical impact, mitigation is not required. Nonetheless, the City will require, through Conditions of Approval, that the future hotel operator include measures to reduce GHG emissions from the hotel development.

Environmental Setting

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal (IPCC, 2007), with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

¹ In *CREED v. City of San Diego* (2011) 196 Cal. App. 4th 515, the court held that the potential for GHG impacts was not substantial new information. Rather, the potential for GHG impacts have been known since well before the EIR for the Specific Plan was adopted. See also *Citizens Against Airport Pollution v. City of San Jose, et al.* (2014) 227 Cal. App. 4th 788.

² *Concerned Dublin Citizens v City of Dublin* (2013) 214 Cal. App. 4th 1301.

Natural processes and human actions have been identified as the causes of this warming. The International Panel on Climate Change (IPCC) concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the earth's atmosphere are the main cause of human-induced climate change. GHGs naturally trap heat by impeding the exit of solar radiation that has reached the earth. Some GHGs occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Greenhouse Gases

Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the principal GHGs. When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect may be enhanced. CO₂, CH₄, and N₂O occur naturally but are also generated through human activity. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing³ associated with agricultural practices and landfills. Other human-generated GHGs, which have much higher heat-absorption potential than CO₂, include fluorinated gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆), which are byproducts of certain industrial processes.

CO₂ is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO₂. CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of 25 and 310 times that of CO₂, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons (MTs) of CO₂ equivalents (CO₂e). CO₂e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO₂e.

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO₂ emissions (and thus substantial increases in atmospheric concentrations of CO₂). In pre-industrial times (c. 1860), concentrations of

³ Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

atmospheric CO₂ were approximately 280 parts per million (ppm) (GRID-Arendal, 2013). By August 2013, atmospheric CO₂ concentrations had increased to 395 ppm, by over 40% above pre-industrial concentrations (ESRL, 2013). There is international scientific consensus that human-caused increases in GHGs have contributed and will continue to contribute to global warming.

Impacts of Climate Change

Impacts in California

Global warming impacts in California include loss in snow pack, rise in sea level, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include the displacement of thousands of coastal businesses and residences, loss of infrastructure, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. Global warming would cause detrimental effects to some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and electrical power generation: "[t]he impacts of global warming are already being felt in California. The Sierra snowpack, an important source of water supply for the state, has shrunk 10 percent in the last 100 years. It is expected to continue to decrease by as much as 25 percent by 2050. World-wide changes are causing sea levels to rise – about 8 inches of increase has been recorded at the Golden Gate Bridge over the past 100 years – threatening low coastal areas with inundation and serious damage from storms" (CARB, 2008).

Ecosystem and Biodiversity Impacts

Climate change is expected to have effects on diverse types of ecosystems, from alpine to deep-sea habitat (U.S. EPA, 2008a). As temperatures and precipitation change, seasonal shifts in vegetation would occur; this could affect the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive species. The IPCC states that "20 percent to 30 percent of species assessed may be at risk of extinction from climate change impacts within this century if global mean temperatures exceed 2 to 3°C (3.6 to 5.4°F) relative to pre-industrial levels" (IPCC, 2007). Shifts in existing biomes could also make ecosystems vulnerable to encroachment by invasive species. Wildfires, which are an important control mechanism in many ecosystems, may become more severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. In general terms, climate change is expected to put a number of stressors on ecosystems, with potentially catastrophic effects on biodiversity.

Human Health Impacts

Climate change may increase the risk of vector-borne infectious diseases, particularly those found in tropical areas and spread by insects such as malaria, dengue fever, yellow fever, and encephalitis (U.S. EPA, 2008b). Cholera, which is associated with algal blooms, could also increase (NCBI, 1993). While these health impacts would largely affect tropical areas, effects would also be felt in California. For example, warming of the atmosphere is expected to increase smog and particulate pollution, which will adversely affect individuals with heart and respiratory

problems, such as asthma. Extreme heat events are also expected to occur with more frequency. The elderly, children, and the homeless are particularly vulnerable to extreme heat events. Finally, the water supply impacts and seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.

Greenhouse Gas Emissions Estimates

Global Emissions

Worldwide emissions of GHGs in 2011 were 25 billion tons of CO₂e per year (UNFCCC, 2013). This figure includes ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes.

U.S. Emissions

In 2009, the United States emitted about 6.7 billion tons of CO₂e or about 21 tons/ person/ year. Of the four major sectors nationwide — residential, commercial, industrial, and transportation — transportation accounts for the highest fraction of GHG emissions (approximately 33%); these emissions are entirely generated from direct fossil fuel combustion (U.S. EPA, 2011).

State of California Emissions

In 2011, California emitted approximately 448 million tons of CO₂e, or about 7% of U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. By contrast, California has one of the lowest per capita GHG emission rates in the country, due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (CEC, 2007). Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

The California Environmental Protection Agency's Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO₂ equivalence) were as follows (CalEPA, 2006):

- Carbon dioxide (CO₂) accounted for 83.3%;
- Methane (CH₄) accounted for 6.4%;
- Nitrous oxide (N₂O) accounted for 6.8%; and
- Fluorinated gases (HFCs, PFC, and SF₆) accounted for 3.5%.

The California Energy Commission (CEC) found that transportation is the source of approximately 41% of the state's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 23% and industrial sources at 20%. Agriculture and forestry are the source of approximately 8.3%, as is the source categorized as "other," which includes residential and commercial activities (CEC, 2007).

Bay Area Emissions

In the San Francisco Bay Area, the transportation sector and industrial/commercial sector represent the largest sources of GHG emissions, accounting for 36.4% each of the Bay Area’s 95.8 million tons of CO₂e in 2007. Electricity/co-generation sources account for about 15.9% of the Bay Area’s GHG emissions, followed by residential fuel usage at about 7.1%. Off-road equipment and agricultural/farming sources currently account for approximately 3% and 1.2% of the total Bay Area GHG emissions, respectively (BAAQMD, 2010).

City of San Bruno Emissions

The City of San Bruno has developed a GHG emissions inventory estimating citywide GHG emissions for the year 2005 (City of San Bruno Climate Action Plan, 2012). This citywide GHG emissions inventory includes a measure of communitywide emissions and emissions from municipal operations associated with energy used, fuel consumed, and waste produced within the San Bruno city limits. The GHG inventory also accounts for emissions from industrial point sources, energy used to convey water to San Bruno, pass-through highway travel, and energy used to manufacture products purchased and used in San Bruno. **Table 4.B-1** describes San Bruno’s GHG emissions inventory, including communitywide emissions and municipal operations emissions.

**TABLE 4.B-1
 SAN BRUNO COMMUNITYWIDE GHG EMISSIONS INVENTORY SUMMARY – 2005
 (tons/year)**

GHG Emissions Source	Metric Tons of Carbon Dioxide Equivalent (CO₂e)
Communitywide Inventory Total	280,531
Residential Energy Use	50,976
Commercial/Industrial Energy Use	45,857
Transportation – Local Roads	48,184
Transportation – State Highways	117,194
Transportation – Off-road Equipment	11,325
Generated Waste	6,995
Municipal Operations	3,073
Buildings and Facilities	766
Employee Commute	711
Water Transport	659
Vehicle Fleet	525
Public Lighting	316
Government-Generated Solid Waste	96

SOURCE: City of San Bruno, 2012.

Regulatory Framework

Federal

U.S. Environmental Protection Agency “Endangerment” and “Cause or Contribute” Findings

In *Massachusetts v. Environmental Protection Agency et al.*, 12 states and cities, including California, together with several environmental organizations, sued to require the U.S. EPA to regulate GHGs as pollutants under the Clean Air Act (127 S. Ct. 1438 (2007)). The U.S. Supreme Court ruled that GHGs fit within the Clean Air Act’s definition of a pollutant and the U.S. EPA had the authority to regulate GHGs.

On December 7, 2009, the U.S. EPA Administrator signed two findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- **Endangerment Finding:** The current and projected concentrations of six key GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the U.S. EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year (FY) 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required the U.S. EPA to develop “...mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy....” The Reporting Rule applies to most entities that emit 25,000 metric tons of CO₂e or more per year. Starting in 2010, facility owners were required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for the U.S. EPA to verify annual GHG emissions reports.

State

The legal framework for GHG emission reduction in California has come about through Executive Orders, legislation, and regulation. The major components of California’s climate change initiative are reviewed below.

Executive Order S-3-05

In 2005, in recognition of California’s vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05, which sets forth the following target dates by which statewide GHG emissions would be progressively reduced: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80% below 1990 levels.

Assembly Bill 32 and the California Climate Change Scoping Plan

In 2006, the California legislature passed Assembly Bill 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25% reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15% from current levels for local governments themselves and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008 (re-approved by CARB on August 24, 2011 [CARB, 2008]) outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30% below projected 2020 business-as-usual emissions levels or about 15% from today's levels. The Scoping Plan recommends measures for further study and possible State implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO₂e (about 191 million U.S. tons) from the transportation, energy, agriculture, forestry, and other sources could be achieved should the State implement all of the measures in the Scoping Plan. The Scoping Plan relies on the requirements of Senate Bill (SB) 375 (discussed below) to implement the carbon emission reductions anticipated from land use decisions.

The *First Update to the Climate Change Scoping Plan* describes progress made to meet near-term emissions goals of AB 32, defines California's climate change priorities and activities for the next few years, and describes the issues facing the State as it establishes a framework for achieving air quality and climate goals beyond the year 2020. In regards to achieving the 2050 GHG reduction goal, "progressing toward California's long-term climate goals will require that GHG reduction rates be significantly accelerated. Emissions from 2020 to 2050 will have to decline at more than twice the rate of that which is needed to reach the 2020 statewide emissions limit" (CARB, 2014).

Cap-and-Trade Program

The Scoping Plan identifies cap-and-trade as a key strategy for helping California reduce its GHG emissions (CARB, 2008). A cap-and-trade program sets the total amount of greenhouse gas emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself was to begin in 2012. However, a San Francisco Superior Court judge issued a final order implementing a decision that found flaws in CARB's adoption of the Scoping Plan. CARB appealed the judge's order, which blocked CARB from implementing its recently adopted cap-and-trade program, and has obtained a temporary suspension from the appellate court. The first auction of "carbon offset credits" was held in November 2012.

Carbon offset credits are created through the development of projects, such as renewable energy generation or carbon sequestration projects, that achieve a reduction of emissions or an increase

in the removal of carbon from the atmosphere from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. Offsets are verified reductions of emissions whose ownership can be transferred to others. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. Offsets used to meet regulatory requirements must be quantified according to CARB-adopted methodologies, and CARB must adopt a regulation to verify and enforce the reductions. The criteria developed will ensure that the reductions are quantified accurately and are not double-counted within the system (CARB, 2008).

Executive Order S-1-07

Executive Order S-1-07, signed by then-Governor Arnold Schwarzenegger in 2007, proclaimed that the transportation sector is the main source of GHG emissions in California, at over 40% of statewide emissions. The order established a goal of reducing the carbon intensity of transportation fuels sold in California by a minimum of 10% by 2020. It also directed CARB to determine whether this Low Carbon Fuel Standard could be adopted as a discrete, early-action measure after meeting the mandates in AB 32. CARB adopted the Low Carbon Fuel Standard on April 23, 2009.

California Environmental Quality Act and Senate Bill 97

The California Environmental Quality Act (CEQA) requires lead agencies to disclose, consider, and mitigate the adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. Senate Bill 97 and other California regulations address global climate change through revisions to the CEQA *Guidelines* and implementation of GHG emission reduction programs as described below.

SB 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The California Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010.

On December 30, 2009, the Natural Resources Agency adopted the State CEQA Guidelines amendments, as required by SB 97. These State CEQA *Guidelines* amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments became effective March 18, 2010.

The CEQA *Guidelines* § 15064.4 specifically address the significance of GHG emissions. Section 15064.4 calls for a "good-faith effort" to "describe, calculate or estimate" GHG emissions in CEQA environmental documents. Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions, (2) whether the project emissions would exceed a locally applicable threshold of significance, and (3) the extent to which the project would comply with "regulations

or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.” The revisions also state that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (§ [h]{3}). The CEQA *Guidelines* revisions do not, however, set a numerical threshold of significance for GHG emissions.

The revisions also include the following guidance (§ 15126.4[c]) on measures to mitigate GHG emissions, when such emissions are found to be significant:

Consistent with § 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency’s decision;
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project’s emissions;
- (4) Measures that sequester greenhouse gases; and
- (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

Assembly Bill 1493 (Pavley Standards)

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493, which required the California Air Resources Board (CARB) to develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004, adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within

various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight [GVW] rating of less than 10,000 pounds and that is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37% lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a GVW of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions will be reduced approximately 24% between 2009 and 2016.

Because the Pavley standards (named for the bill's author, State Senator Fran Pavley) would impose stricter standards than those under the federal Clean Air Act, California applied to the U.S. EPA for a waiver under the federal Clean Air Act; this waiver was denied in 2008. In 2009, however, the U.S. EPA granted the waiver.

Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20% of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which increased the State's Renewable Portfolio Standard to 33% renewable power by 2020. In September 2009, Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs CARB under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33% renewable energy by 2020.

The 33% by 2020 goal was codified in April 2011 with Senate Bill X1-2, which was signed by Governor Brown. This new Renewable Portfolio Standard preempts the CARB 33% Renewable Electricity Standard and applies to all electricity retailers in the State, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the new Renewable Portfolio Standard goals of 20% of retail sales from renewables by the end of 2013 and 25% by the end of 2016, with the 33% requirement being met by the end of 2020.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by then-Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (PUC) to establish a GHG emission performance standard for baseload generation from investor-owned utilities by February 1, 2007. The CEC was also required to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Senate Bill 375

In addition to policy directly guided by AB 32, the legislature in 2008 passed SB 375, which provides for regional coordination in land use and transportation planning and funding to help meet the AB 32 GHG reduction goals. SB 375 aligns regional transportation planning efforts, regional GHG emissions reduction targets, and land use and housing allocations. SB 375 requires Regional Transportation Plans (RTPs) developed by the State's 18 metropolitan planning organizations (MPOs) to incorporate a "sustainable communities strategy" (SCS) that will achieve GHG emission reduction targets set by CARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development. The Metropolitan Transportation Commission (MTC) is responsible for developing RTPs for the San Francisco Bay Area. MTC's 2013 RTP will be its first plan subject to SB 375.

Regional

In June 2010, the Bay Area Air Quality Management District (BAAQMD) issued its *CEQA Air Quality Guidelines*, replacing former guidelines adopted in December 1999, and adopted new thresholds of significance to assist lead agencies in determining when potential air quality impacts would be considered significant under CEQA. Updated in May 2012, these guidelines include recommendations for analytical methodologies to determine air quality impacts and identify mitigation measures that can be used to avoid or reduce air quality impacts, including impacts of GHGs (BAAQMD, 2012).

In May of 2011 the BAAQMD adopted new Thresholds of Significance (2011 Thresholds) for GHG impacts. Subsequently, the Alameda Superior Court issued a stay and required the BAAQMD to conduct additional environmental review in connection with its adoption of the thresholds. However, in August 2013 the State Court of Appeal issued a full reversal of the Superior Court ruling, although at the time of this analysis, BAAQMD has not formally readopted these thresholds. While the significance thresholds adopted by BAAQMD in 2011 are not currently recommended by the BAAQMD, these thresholds are based on substantial evidence identified in BAAQMD's 2009 *Justification Report* and are therefore used within this document.

The threshold for stationary sources is 10,000 metric tons of CO₂e per year (i.e., emissions above this level may be considered significant). For non-stationary sources, three separate thresholds have been established:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy (i.e., if a project is found to be out of compliance with a Qualified Greenhouse Gas Reduction Strategy, its GHG emissions may be considered significant); or
- 1,100 metric tons of CO₂e per year (i.e., emissions above this level may be considered significant); or
- 4.6 metric tons of CO₂e per service population (SP) per year (i.e., emissions above this level may be considered significant). "Service population" is the sum of residents plus employees expected for a development project.

For quantifying a project's GHG emissions, BAAQMD recommends that all GHG emissions from a project be estimated, including a project's direct and indirect GHG emissions from operations. Direct emissions refer to emissions produced from onsite combustion of energy, such as natural gas used in furnaces and boilers, emissions from industrial processes, and fuel combustion from mobile sources. Indirect emissions are emissions produced offsite from energy production and water conveyance due to a project's energy use and water consumption. BAAQMD has provided guidance on detailed methods for modeling GHG emissions from proposed projects (BAAQMD, 2012). The above stated thresholds apply only to operational emissions. To date, the BAAQMD has not adopted numeric thresholds for the assessment of construction-related emissions.

Local

City of San Bruno General Plan

The Environmental Resources and Conservation Element and Transportation Element of the San Bruno General Plan contain the following GHG objectives and policies that would apply to the adoption and development under the Specific Plan (City of San Bruno, 2009).

- **PFS-61:** Require that all new development complies with California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6).
- **PFS-63:** Require new development to incorporate passive heating and natural lighting strategies if feasible and practical. These strategies should include, but are not limited to, the following:
 - Using building orientation, mass and form, including façade, roof, and choice of building materials, color, type of glazing, and insulation to minimize heat loss during winter months and heat gain during the summer months;
 - Designing building openings to regulate internal climate and maximize natural lighting, while keeping glare to a minimum; and
 - Reducing heat-island effect of large concrete roofs and parking surfaces.
- **PFS-64:** Enforce landscape requirements that facilitate efficient energy use or conservation, such as drought-resistant landscaping and/or deciduous trees along southern exposures.
- **PFS-68:** Facilitate environmentally sensitive construction practices by:
 - Restricting use of chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and halons in mechanical equipment and building materials;
 - Promoting use of products that are durable and allow efficient end-of-life disposal (e.g. reusable, recyclable, biodegradable);
 - Promoting the purchase of locally or regionally available materials; and
 - Promoting the use of cost-effective design and construction strategies that reduce resource and environmental impacts.
- **T-1:** Develop incentives for San Bruno government and private employers to institute staggered working hours, compressed work week, home-based telecommuting, carpooling,

use of transit, alternative fuel vehicles, and bicycling to employment centers to reduce vehicle miles traveled and the associated traffic congestion and air pollution.

- **T-3:** Encourage provision of bicycle facilities such as weather protected bicycle parking, direct and safe access for pedestrians and bicyclists to adjacent bicycle routes and transit stations, showers and lockers for employees at the worksite, secure short-term parking for bicycles, etc.
- **T-4:** Encourage major employers of the City to provide shuttle service for employees from worksite to food service establishments, commercial areas, and transit stations, to reduce the number of automobile trips.

City of San Bruno Climate Action Plan

The City of San Bruno Climate Action Plan (CAP) has been developed to identify, evaluate and recommend prioritized actions to reduce GHG emissions in San Bruno. The CAP identifies energy and climate goals, clarifies policy direction, and identifies priority actions for reducing energy use and GHG emissions. The CAP includes a goal to reduce GHG emissions by 15 percent below the 2005 emissions level by 2020 (City of San Bruno, 2012). The City released the Draft CAP for public review on October 4, 2012. The CAP had not been adopted at the time of the printing of this Supplemental EIR.

The CAP describes the City's strategic plan to reduce GHG emissions through a set of goals that address emissions from energy use, transportation and land use, solid waste, and climate adaptation. The CAP includes the following GHG reduction goals:

- **4.1.1 Goal:** Reduce energy use in existing buildings and in new construction
- **4.1.2 Goal:** Increase the use of renewable energy
- **4.1.3 Goal:** Improve water conservation
- **4.2.1 Goal:** Encourage development and programs that support alternative modes of transportation and reduce single occupant vehicle travel
- **4.2.2 Goal:** Expand parking policies to promote the use of low emissions vehicles and alternative modes of transportation
- **4.2.3 Goal:** Promote use of fuel efficient vehicles in municipal fleet and reduce public employee VMT
- **4.3.1 Goal:** Set policies for increasing diversion rates

The CAP strategies are achieved through associated implementation measures that include existing implemented measures, and measures to implement in the near-term (0-2 years), mid-term (3-5 years), and long-term (5+ years) through 2015, at which point the CAP will undergo its first update to revise policies and planning efforts and ensure target achievement.

Impacts and Mitigation Measures

This analysis evaluates the proposed project's impacts related to greenhouse gases emission and climate change. The evaluation considered project plans, current CEQA *Guidelines* Appendix G significance thresholds, conditions at the project site, and applicable regulations and guidelines.

Significance Criteria

Significance criteria used in this analysis are based on Appendix G of the CEQA *Guidelines*, and the BAAQMD's 2011 Thresholds for GHG emissions. Specifically, the proposed project would have a significant effect on the environment if it were to:

- Generate greenhouse gas emissions in excess of 1,100 metric tons of CO₂e annually and 4.6 MT CO₂e/SP/yr; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Approach to Analysis

GHG emissions resulting from the project were estimated using CalEEMod version 2013.2.2, with model data and assumptions included in **Appendix D**. Construction emissions were estimated for equipment and truck exhaust and construction worker vehicles. In regards to operations, vehicle trips assumed default trip lengths for urban land uses, which are embedded in CalEEMod. The model makes adjustments for implementation of Pavley vehicle standards and Low Carbon Fuel Standards. Area and indirect sources associated with project operations would primarily result from electrical usage, water and wastewater transport (the energy used to pump water and wastewater to and from the project) and solid waste generation. GHG emissions from electrical usage are generated when energy consumed on the site is generated by fuel combustion. GHG emissions from water and wastewater transport are also indirect emissions resulting from the energy required to transport water from its source, and the energy required to treat wastewater and transport it to its treated discharge point. Solid waste emissions are generated when the increased waste generated by the project are taken to a landfill to decompose.

Both BAAQMD and California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be exclusively cumulative impacts, in that no single project could, by itself, result in a substantial change in climate (BAAQMD, 2012 and CAPCOA, 2008). Therefore, the evaluation of GHG impacts evaluates whether the project would make a considerable contribution to cumulative climate change effects.

This analysis uses both a quantitative and a qualitative approach. The quantitative approach is used to address the first significance criterion: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? This analysis considers that, because the quantifiable thresholds developed by BAAQMD in its 2009 *Justification Report* were formulated based on AB 32 and California Climate Change Scoping Plan reduction targets for which its set of strategies were developed to reduce GHG emissions

statewide, a project cannot exceed a numeric BAAQMD threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (the state Climate Change Scoping Plan). Therefore, if a project, on a plan consistency level, exceeds a numeric threshold and results in a significant cumulative impact, it would also result in a significant cumulative impact with respect to plan, policy, or regulation consistency, even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

In regards to consistency with Executive Order S-3-05 and the goal of reducing Statewide GHGs by 80 percent below 1990 levels by the year 2050, there are no protocols or thresholds that establish a basis for significance determination. However, as described in the *First Update to the Climate Change Scoping Plan*,

“...if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions” (CARB, 2014).

It is likely that additional GHG reduction measures established during the long-term operation of the project would apply to direct and indirect sources of GHGs associated with the project (such as from energy and transportation). For the purposes of this analysis, based on the projections described above in the *First Update to the Climate Change Scoping Plan* in relation to expected benefits of existing policy goals, if the project is determined to be consistent with the GHG reduction goals for 2020, it would also be considered consistent with the reduction goals for 2050.

Impact Analysis

Impact 4.B-1: Construction and operation of a hotel allowed under the Specific Plan Amendment would result in an increase in GHG emissions. (Less than Significant)

As described in the introduction to this Section, GHGs were not analyzed in the Specific Plan EIR and were not commonly analyzed in CEQA documents at the time the Specific Plan EIR was prepared and adopted. However, information about GHGs could have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was adopted, and therefore, are not considered new information.

Further, physical impacts of the proposed project are incrementally less than the project that was considered in the Specific Plan EIR as the proposed Specific Plan Amendment reduces the hotel from 500 rooms to 152 rooms. So, although this analysis presents the proposed project’s physical impacts related to GHG, the physical impacts of the project are less than what was considered in

the Specific Plan.⁴ The impact analysis presented in this section evaluates the construction and operation of the hotel related to GHGs for informational purposes only.

Application of BAAQMD's project-specific GHG emissions thresholds is to include both direct emissions from a project's vehicle trip generation and onsite water and space heating and other stationary sources, as well as indirect emissions from offsite electrical generation, solid waste generation, and water conveyance and treatment. The following activities associated with the proposed project could contribute to the generation of GHG emissions:

- **Construction Activities.** Construction equipment typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, methane, and N₂O. Methane is also emitted during the fueling of heavy equipment.
- **Solid Waste Disposal Emissions.** Resulting emissions associated with waste generation and disposal in landfills are indirect. Landfills emit anthropogenic methane from the anaerobic breakdown of material.
- **Gas, Electricity, and Water Use.** Natural gas use results in the emissions of two GHGs: methane (the major component of natural gas) and CO₂ from the combustion of natural gas. Methane is released prior to initiation of combustion of the natural gas (as before a flame on a stove is sparked), and from the small amount of methane that is uncombusted in a natural gas flame. Electricity use can result in GHG production if the electricity is generated by combustion of fossil fuel. GHG emissions associated with treatment and transport of water is also included in the analysis below.
- **Motor Vehicle Use.** Transportation associated with the project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips. However, not all of these emissions would be "new" to the region or state since drivers would likely have relocated from another area. To be conservative, however, all vehicle trips predicted to be generated by the project scenarios in the Transportation analysis were assumed to be new trips in this analysis.

BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. The proposed project would consist of construction activities including site preparation, earthmoving and general building construction. GHGs would be generated by construction equipment, haul trucks, and worker vehicles. As shown in Appendix D, project construction would result in maximum annual GHGs of approximately 462 metric tons of CO₂-equivalents (CO₂e).

In regards to operations, the CalEEMod model was used to estimate GHG emissions from motor vehicle trips, grid electricity usage, solid waste, and other sources (including area sources, natural gas combustion, and water/wastewater conveyance). **Table 4.B-2** presents an estimate of the proposed project's unmodified and modified operational CO₂e emissions.

⁴ *Concerned Dublin Citizens v City of Dublin* (2013) 214 Cal. App. 4th 1301.

**TABLE 4.B-2
 ESTIMATED EMISSIONS OF GREENHOUSE GASES
 FROM CONSTRUCTION AND OPERATION OF THE PROJECT**

Source ^a	Emissions (metric tons of CO ₂ e per year)
Unmodified Project Operations	1,254
Modified Project Operations ^b	1,072
<i>BAAQMD GHG Threshold</i>	<i>1,100</i>
<i>Significant (Yes or No)?</i>	<i>No</i>

^a GHG emissions were calculated using the CalEEMod model for the project site development and for project operations. Trip rates were adjusted to account for shuttles. Additional assumptions and data are included in Appendix D.
^b Assumes implementation of the Specific Plan amendment noted below: Solar photovoltaic panels installed (6,000 sf for ~25 MT CO₂e/yr reduction), 15% improvement over 2013 Title 24 standards, 15% lighting energy reduction, energy efficient appliances, low flow faucets, toilets, and showers, efficient irrigation-systems, and a 10% reduction in waste disposed due to recycling.

Table 4.B-2 indicates that unmodified GHG emissions associated with the proposed project would exceed the BAAQMD’s GHG threshold of 1,100 metric tons of CO₂e per year. However, the project would need to comply with the conservation standards that are a part of the proposed Specific Plan amendment. With compliance of the conservation standards under this amendment described below, operational emissions associated with the project would be reduced to below the BAAQMD threshold. This would represent a less-than-significant cumulative GHG impact.

Specific Plan Amendment: The City shall require that the hotel operator be committed to the reduction of long-term operational greenhouse gas emissions to the extent feasible through the implementation of strict control measures. Control measures shall include, but are not limited to:

- Install a minimum of 6,000 square feet of solar photovoltaic panels on the rooftop.
- Improve the building envelope energy efficiency 15% over 2013 Title 24 standards;
- Incorporate high efficiency lighting (such as LEDs, metal halide post top, metal halide cobrahead or cutoff lights, or high pressure sodium cutoff lights) into public areas, such as parking lots, garages, and other exterior areas to achieve at least 15% lighting energy reduction compared to the use of mercury cobrahead lights;
- Install energy efficient appliances that comply with the most recent U.S. EPA Energy Star criteria, including refrigerators, dish washers, fans, and clothes washers;
- Incorporate water conservation strategies, including the installation of low flow faucets, toilets, and showers, as well as water efficient irrigation-systems;
- Institute recycling and composting services in order to achieve at least a 10% reduction in waste disposed.

Although this amendment to the Specific Plan is newly identified and was not included in the Specific Plan EIR, pursuant to the *Concerned Dublin Citizens v City of Dublin*, the physical

impacts of the proposed Specific Plan Amendment, which would allow for the development of a 152-room hotel, would be less than the 500-room hotel analyzed in the Specific Plan EIR, and it therefore, does not qualify as “significant new information,” as it does not show that the physical impact the project will have on the environment has changed since the Specific Plan EIR was adopted.

The City would require that the future hotel operator to adhere to the Specific Plan amendment provisions that would result in a reduction in GHG emissions as part of project implementation.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.B-2: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially conflict with the AB 32 Scoping Plan or City of San Bruno Plans and Policies for reducing GHG emissions. (Less than Significant)

The State of California’s Climate Change Scoping Plan identifies 39 Recommended Actions (qualitative measures) to address climate change. Of the 39 measures identified, those that would be considered to have the greatest potential applications to the Project would be those actions related to electricity and natural gas use (E), and green building design (GB). Scoping Plan Actions E-1 and GB-1 together aim to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. The proposed project would be designed to meet Title 24 building energy requirements which were recently updated in 2013 to address these Scoping Plan Actions. Additionally, the Specific Plan amendment provisions identified above to address quantitative GHG emissions would also serve to ensure consistency with the goals of the Scoping Plan. Consequently, as the proposed project would implement a variety of green building design measures it would be consistent with the Recommended Actions of the Climate Change Scoping Plan adopted by CARB to achieve the goals of AB 32.

In regards to consistency with Executive Order S-3-05 and the goal of reducing Statewide GHGs by 80 percent below 1990 levels by the year 2050, there are no established protocols or thresholds of significance for that future year analysis. However, as described within the “Methodology and Assumptions” discussion above, since the Project would not exceed the recommended threshold and would not conflict with the 2020 AB 32 and Climate Change Scoping Plan reduction targets, it would also be considered to comply with the 2050 reduction targets of Executive Order S-3-05.

Therefore, the proposed project would not conflict with the GHG reduction measures identified in CARB’s AB 32 Scoping Plan or other applicable plan or policy for reducing GHG emissions, and therefore would ensure that the proposed project’s impact on GHGs is less-than-significant.

The City of San Bruno is currently working on the adoption of its Climate Action Plan. Moreover, the physical impacts of the proposed Specific Plan Amendment, which would allow for the development of a smaller, 152-room hotel, would be less than the 500-room hotel authorized by the Specific Plan and analyzed in the Specific Plan EIR. Finally, the City would require the future hotel operator to comply with the proposed Specific Plan Amendment's conservation standards identified above, which would reduce the reduced-size hotel's GHG emissions to a less-than-significant level.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

References

- Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance. October 2009.
- BAAQMD, 2010. Source Inventory of Bay Area Greenhouse Gas Emissions. Updated February 2010.
- BAAQMD, 2012. CEQA Air Quality Guidelines. Adopted June 2011, updated May 2012. Available at www.baaqmd.gov.
- California Air Pollution Control Officers Association (CAPCOA), 2008. CEQA and Climate Change Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January 2008.
- California Air Resources Board (CARB), 2008. Climate Change Scoping Plan. Adopted December 11, 2008, re-approved by CARB on August 24, 2011.
- California Air Resources Board (CARB), 2014. First Update to the Climate Change Scoping Plan. May 2014.
- California Energy Commission (CEC), 2007. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004.
- California Environmental Protection Agency (CalEPA), 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.
- City of San Bruno, 2009. San Bruno General Plan. March 24, 2009.
- City of San Bruno, 2012. City of San Bruno Climate Action Plan, Public Review Draft. October, 2012.
- Earth System Research Laboratory (ESRL), 2013. Recent Monthly Mean CO₂ at Mauna Lora. Available at: <http://www.esrl.noaa.gov/gmd/ccgg/trends/>. Accessed on October 8, 2013.

GRID-Arendal, 2013. Global Atmospheric Concentration of CO₂. Available at <http://www.grida.no/publications/vg/climate/page/3062.aspx>. Accessed on October 8, 2013.

Intergovernmental Panel on Climate Change (IPCC), 2007. Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change [Parry, Martin L., Canziani, Osvaldo F., Palutikof, Jean P., van der Linden, Paul J., and Hanson, Clair E. (eds.)]. Cambridge University Press, Cambridge, United Kingdom.

National Center for Biotechnology Information (NCBI), 2013. Algal Blooms in the Spread and Persistence of Cholera. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/8155853>. Accessed on October 8, 2013.

United Nations Framework Convention on Climate Change (UNFCCC), 2013. GHG total excluding LULUCF: Total CO₂ Equivalent Emissions without Land Use, Land-Use Change and Forestry. Available at http://unfccc.int/ghg_emissions_data/predefined_queries/items/3814.php, viewed October 11, 2013.

U.S. EPA, 2008a. Climate Change – Ecosystems and Biodiversity. Available at: <http://www.epa.gov/climatechange/effects/eco.html>. Accessed on August 28, 2013.

U.S. EPA, 2008b. Climate Change – Health and Environmental Effects. Available at: <http://www.epa.gov/climatechange/effects/health.html#climate>. Accessed on August 28, 2013.

U.S. EPA, 2011. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009; Executive Summary. Available at <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2011-Executive-Summary.pdf>. Accessed on August 28, 2013.

C. Transportation and Circulation

This section describes and evaluates issues related to Transportation and Circulation in the context of the proposed Specific Plan Amendment. Discussed are the physical and regulatory setting; the baseline for determining environmental impacts; the criteria used for determining the significance of environmental impacts; and potential impacts and appropriate mitigation measures, as compared to the Specific Plan EIR.

The Specific Plan EIR evaluated the environmental impacts of the buildout of the U.S. Navy Site and its Environs and found that significant transportation impacts would not result at local intersections due to the buildout of the proposed Specific Plan. However, four intersections would continue to operate at worse than acceptable levels of service, and potential improvements were outlined to be considered to improve local traffic conditions. These improvements include:

El Camino Real/Noor Avenue: Signalization of this intersection

El Camino Real/Sneath Lane: Installation of an additional southbound left-turn lane (for a total of two left-turn lanes in the southbound direction); additional right-of-way and other considerations would be taken into account if the additional turn lane were provided.

El Camino Real/Commodore Drive – Tanforan Shopping Center Driveway: Installation of an additional eastbound right turn lane (for a total of two right turn lanes in the eastbound direction; additional right-of-way and other considerations would need to be taken into account if the additional turn lane were provided.

Cherry Avenue/Commodore Drive: Reconfigure to have one shared left-through lanes and one right-turn lane on the westbound approach.

Of the four identified improvements, only the modifications to the intersection of El Camino Real and Sneath Lane have been constructed as outlined. The intersection of El Camino Real and Noor Avenue includes improvements to allow only right turns at the “T” intersection; however it has not been signalized. The other improvements have not been implemented.

To reduce the impact of the redevelopment of the U.S. Navy Site, the Specific Plan EIR requires **Mitigation Measure D.3** to coordinate shared parking across the land uses and **Mitigation Measure D.4** which requires a project specific traffic study to ensure impacts from unique site characteristics are less than significant. The analysis presented below fulfills Mitigation Measure D.4 for the proposed project.

There are no substantial changes in the proposed project or new information of substantial importance since the *U.S. Navy Site and Its Environs Specific Plan EIR* (Specific Plan EIR) that would result in any new significant environmental effects or substantial increase in the severity or previously identified significant effects related to transportation. As described below, the proposed project would have less than significant impacts to transportation, which is consistent with the Specific Plan EIR. Therefore, the proposed project would not result in any new potentially significant transportation effects that were not identified in the Specific Plan EIR or a substantial increase in the severity of any previously identified significant transportation effects.

However, because the Specific Plan planning area is largely built out and because of the passage of time, this analysis assesses the proposed project on the current circulation system to ensure there are no new or more severe impacts.

Environmental Setting

The existing transportation-related context for the project is described below, beginning with a description of the street network that serves the project site and surroundings. Existing transit service, and bicycle and pedestrian facilities in the vicinity of the project are also described. Intersection levels of service criteria are then defined, and current operating conditions for intersections in the project vicinity are summarized.

Existing Roadway Network

The project site is located in the northeastern portion of the City of San Bruno, in the vicinity of San Bruno BART Station at the juncture of Interstate 380 and El Camino Real. A site vicinity map showing the project location and surrounding roadway network is provided in **Figure 4.C-1**. Vehicular access to the site would be provided by Commodore Drive. Roadways serving the project area are described below.

US 101 extends north to San Francisco and south to San Jose. Near the project site, US 101 has five mixed-flow lanes. An interchange at I-380 provides local access. Near the project site, US 101 has an existing annual average daily traffic (AADT) volume is about 229,000 vehicles (Caltrans, 2014).

I-280 extends north to San Francisco and south to San Jose. Near the project site, I-280 is an eight-lane freeway and includes a full interchange at its junction with Sneath Lane. The AADT on the freeway is about 192,000 vehicles (Caltrans, 2014).

I-380 is an approximately 1.5-mile-long east-west freeway that connects US 101 and I-280. I-380 has four mixed-flow lanes in each direction. Local access is provided via an interchange at El Camino Real. The AADT on the freeway is about 159,000 vehicles (Caltrans, 2014).

State Route 82 (SR 82) or El Camino Real is a six-lane, north-south, divided arterial. El Camino Real is primarily fronted by civic and commercial land uses, including retail and auto repair facilities. In the project area, AADT on the roadway is about 41,500 vehicles (Caltrans, 2014).

Commodore Drive is a two-lane divided east-west roadway that extends from El Camino Real to the east and Cherry Avenue to the west. The roadway provides a direct connection to El Camino Real.

Traffic level of service (LOS) conditions was assessed at the following four intersections for the weekday morning (a.m.) and afternoon (p.m.) peak-hour under existing, existing plus project, cumulative, and cumulative plus project conditions:

1. El Camino Real (SR 82) at Sneath Lane

2. El Camino Real at Commodore Drive
3. El Camino Real at I-380 Westbound Ramps
4. El Camino Real at I-380 Eastbound Ramps

Existing traffic turning movement volumes for the weekday a.m. peak period (7:00 a.m. to 9:00 p.m.) and p.m. peak period (4:00 p.m. to 6:00 p.m.) was collected at the intersections of El Camino Real at Sneath Lane and El Camino Real at Commodore Drive on Tuesday, June 18, 2013. Weekday a.m. and p.m. period traffic turning movement volumes for El Camino Real and the I-380 ramps were provided by count data published in the *Transit Corridors Plan Draft Environment Impact Report* (City of San Bruno, 2012).¹ **Figure 4.C-1** presents the existing traffic volumes at the four study intersections.

The LOS concept is a qualitative characterization of traffic conditions associated with varying levels of traffic, based on quantitative measures of delay and congestion. Descriptions of conditions range from LOS A (free-flow condition) to LOS F (jammed/forced-flow condition), as described in the 2000 *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000). The City of San Bruno has an adopted minimum standard of LOS D for most local intersections, and LOS E for intersections designated in the San Mateo County Congestion Management Plan (CMP) network.² Intersection operations at each study intersection that exceed LOS standards would be deemed unacceptable.

At each study intersection, peak-hour traffic conditions (for the hour of highest traffic volumes during the two-hour peak period) were evaluated using the 2000 HCM operations methodology. The *Synchro* software was used as the analysis tool in this study. The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and intersection controls) to estimate the average control delay experienced by motorists traveling through an intersection; detailed LOS output sheets are located in Appendix E. As shown in **Table 4.C-1**, all four study intersections currently operate at an acceptable LOS (LOS D or better) during the weekday a.m. and p.m. peak hours.

Transit Service

The City of San Bruno is served by three major transit providers, including Caltrain, Bay Area Rapid Transit (BART), and the San Mateo County Transit District (SamTrans). SamTrans currently operates four bus transit routes in proximity of the project site, bus routes 140, 398, and ECR (SamTrans, 2014). Route 140 provides weekday and weekend bus service along El Camino Real with connections between the San Francisco Airport AirTrain Station and the Pacific Manor Shopping Center in Pacifica. This route operates with approximate 30-minute headways (frequency of bus arrivals/departures for bus stops along the route) on weekdays and 60-minute headways on weekends. Route 398 provides weekday and weekend regional bus service along El Camino Real

¹ As indicated on page 14-7 in the *Transit Corridors Plan Draft EIR*, intersection turning movement counts at El Camino Real and I-380 ramps (eastbound and westbound ramps) were conducted for two-hour periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) in early December 2010. Based on review of the traffic volumes relative to nearby intersections, the traffic volumes documented and analyzed in the *Draft EIR* were determined to be appropriate for use in evaluating the proposed project and its effects to the surrounding transportation network.

² None of the study intersections are CMP-designated intersections.

and U.S. 101 with connections between the San Bruno BART station and the Redwood City Transit Center. This route operates with approximate 60-minute headways. Route ECR provides weekday and weekend regional bus service along El Camino Real with connections between the Daly City BART station and the Palo Alto Transit Center. This route operates with approximate 30-minute headways. The nearest bus stop in proximity to the project site is located at the intersection of El Camino Real and Sneath Lane and serves bus routes 140, 398, and ECR, approximately 0.20 mile north of the site (approximately 1,100 feet).

The San Bruno BART station is located along Huntington Avenue, south of Sneath Lane and approximately 0.35 mile east of the project site. At this station, BART provides service to Richmond and Pittsburg to the north via San Francisco, and to Millbrae and the San Francisco International Airport to the south. In Fiscal Year 2013, the San Bruno BART station had an average weekday ridership of approximately 3,600 passengers, which is relatively low compared to other BART stations (BART, 2014).

The San Bruno Caltrain Station is located along Huntington Avenue, south of Sylvan Avenue and about 1.1 miles south of the project site. Caltrain stops at the San Bruno station about every 30 minutes in the northbound direction during the morning peak period and hourly in the southbound direction. Conversely, during the afternoon peak period, Caltrain operates hourly in the northbound direction and about every 30 minutes in the southbound direction. As of Fiscal Year 2013, the San Bruno Caltrain station had an average weekday boarding of approximately 440 passengers, with ridership ranking as number 20 out of the 29 stations (Caltrain, 2014).

Bicycle and Pedestrian Facilities

According to the *Transportation Element* of the City of San Bruno General Plan (2009), bikeways are classified as Class I (bicycle paths separated from roads), Class II (striped bicycle lanes within the paved areas of roadways), or Class III (signed bike routes that allow cyclists to share streets with vehicles). Pedestrian facilities generally include sidewalks, crosswalks, curb ramps, pedestrian signals, and streetscape/landscape amenities (i.e., benches, tree-lined buffers, planters, bulb-outs, street lighting, etc.).

In proximity to the project site, the only bicycle facilities are the Class II bicycle lanes along portions of Sneath Lane. Pedestrian facilities near the project site include sidewalks along nearby roadways, and striped crosswalks and pedestrian signals at most intersections.

To encourage biking and walking throughout the City of San Bruno, there are a number of planned projects to enhance bicycle and pedestrian connectivity to existing and future planned development and multimodal corridors. As presented in the City's General Plan, improved or new bikeways are proposed along El Camino Real and Sneath Lane, and along other major roadways, including San Bruno, Cherry, and Huntington avenues. Further, the project site would be located in a "pedestrian emphasis zone", and this designation per the General Plan recommends various public improvements, including installation of street trees, street lighting, signage/wayfinding, benches, and customized sidewalks and pavers.

Existing Traffic Conditions

Intersection Level of Service Analysis Methodologies

The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long queues and delays). This LOS grading system applies to both signalized and unsignalized intersections. LOS A, B, and C are generally considered satisfactory service levels, while the influence of congestion becomes more noticeable (though still considered acceptable) at LOS D. LOS E and F are generally considered to be unacceptable.

At the signalized study intersections, traffic conditions were evaluated using the 2000 *Highway Capacity Manual* operations methodology. The operation analysis uses various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing and timing) to estimate the average delay experienced by motorists traveling through an intersection. **Table 4.C-1** summarizes the relationship between delay and LOS for signalized intersections.

**TABLE 4.C-1
 DEFINITIONS FOR SIGNALIZED INTERSECTION LEVEL OF SERVICE**

Level of Service	Average Delay Per Vehicle (Seconds)	Description
A	≤ 10.0	Free Flow or Insignificant Delays: Operations with very low delay, when signal progression is extremely favorable and most vehicles arrive during the green light phase. Most vehicles do not stop at all.
B	10.1 to 20.0	Stable Operation or Minimal Delays: Generally occurs with good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay. An occasional approach phase is fully utilized.
C	20.1 to 35.0	Stable Operation or Acceptable Delays: Higher delays resulting from fair signal progression and/or longer cycle lengths. Drivers begin having to wait through more than one red light. Number of vehicles stopping is significant. Most drivers feel somewhat restricted.
D	35.1 to 55.0	Approaching Unstable or Tolerable Delays: Influence of congestion becomes more noticeable. Longer delays result from unfavorable signal progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop. Drivers may have to wait through more than one red light. Queues may develop, but dissipate rapidly, without excessive delays.
E	55.1 to 80.0	Unstable Operation or Significant Delays: Considered to be the limit of acceptable delay. High delays indicate poor signal progression, long cycle lengths and high volume to capacity ratios. Individual cycle failures are frequent occurrences. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	> 80.0	Forced Flow or Excessive Delays: Occurs with oversaturation when flows exceed the intersection capacity. Represents jammed conditions. Many cycle failures. Queues may block upstream intersections.

SOURCE: Transportation Research Board, 2000 *Highway Capacity Manual*.

Study Intersections

Analysis of peak-hour traffic condition was conducted at four signalized intersections in the project vicinity (see list below and Figure 4.C-1). These intersections were selected based on their proximity to the project site, and an examination of the expected dispersion of project traffic volumes on the area’s road network.

1. El Camino Real (SR 82) at Sneath Lane
2. El Camino Real at Commodore Drive
3. El Camino Real at I-380 Westbound Ramps
4. El Camino Real at I-380 Eastbound Ramps

The study intersections were analyzed during weekday a.m. and p.m. peak-hour conditions, which typically occur during the morning and evening commute periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). Manual turning movement counts were conducted at the study intersections during the two-hour peak periods in June 2013. Intersection operations were evaluated for the one hour during each peak period when the highest traffic volumes were measured. The a.m. and p.m. peak-hour volumes are shown in Figure 4.C-1; the raw count data are included in Appendix E.

Existing Intersection Levels of Service

As shown in **Table 4.C-2**, the study intersections are currently operating acceptably, at LOS C or better, during both peak hours, with the exception of two intersections during the p.m. peak hour. The intersections of El Camino Real at Sneath Lane and El Camino Real at the I-380 Westbound Ramps are both operating at LOS D during the p.m. peak hour. LOS calculation sheets are provided in Appendix E.

**TABLE 4.C-2
 EXISTING (2013) INTERSECTION LEVELS OF SERVICE (LOS)
 AND AVERAGE VEHICLE DELAY (seconds per vehicle)**

Study Intersection (all signalized)	Control Type	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
1. El Camino Real / Sneath Lane	Signalized	25.2	C	40.7	D
2. El Camino Real / Commodore Drive	Signalized	10.6	B	20.4	C
3. El Camino Real / I-380 Westbound Ramps	Signalized	19.5	B	37.0	D
4. El Camino Real / I-380 Eastbound Ramps	Signalized	8.5	A	10.6	B

^a LOS calculations performed using Synchro and the 2000 Highway Capacity Manual operations analysis methodology.

SOURCE: ESA (2013).

Regulatory Setting

State

The California Department of Transportation (Caltrans) is responsible for operations and maintenance of the state highway system, and serves as a reviewing agency for Environmental Impact Reports (EIRs) to ensure that impacts of proposed projects would be analyzed and significant impacts on state highway facilities would be disclosed.

Regional

San Mateo City and County Association of Governments

The San Mateo City and County Association of Governments (C/CAG) is a joint powers authority that plans, funds and delivers transportation programs and projects in San Mateo County. C/CAG has developed LOS standards for roadways on the designated Congestion Management Program (CMP) network. CMP facilities in the project vicinity are US 101, I-380, and El Camino Real (SR 82). The CMP peak hour LOS standard is LOS E for the study segments of US 101. The CMP standard is LOS F for the study segments of I-380. The El Camino Real/San Bruno Avenue intersection has a CMP LOS standard of LOS E. C/CAG requires evaluation of road segments on the CMP network per the requirements of the Land Use Analysis Program of the CMP for land use development projects that involve an EIR and that would generate 100 or more p.m. peak hour trips above the existing condition. As stated below, the proposed project would generate fewer than 100 new p.m. peak-hour trips.

Local

City of San Bruno General Plan

The General Plan includes the following policies relevant to consideration of the transportation impacts of the proposed project:

- **T-A:** Provide for efficient, safe, and pleasant movement for all transportation modes-- vehicles, bicycles, transit, and pedestrians.
- **T-B:** Maintain acceptable levels of service for vehicular movement along the city's street network. Acceptable level of service could vary based on characteristics of the area under consideration.
- **T-D:** Provide adequate parking facilities for commercial, industrial, and transit station areas.
- **T-E:** Focus San Bruno's efforts on improvements to the non-motorized transportation system (i.e., bicycles, pedestrians, strollers, etc) adjacent to transit corridors and stations, and their connections to those systems.
- **T-F:** Provide efficient local transit--such as a shuttle system--to the BART and Caltrain stations to avoid dependence on individual motor vehicles.
- **T-G:** Protect residential areas from congestion and associated noise resulting from BART and Caltrain spillover traffic.

- **T-H:** Expand the existing bus network to provide convenient and efficient public transit to employment centers, shopping areas, parks, and other key destinations.
- **T-I:** Develop and maintain a comprehensive bicycle network within San Bruno, providing connections to BART and Caltrain, surrounding cities, employment and shopping areas, and natural areas.
- **T-J:** Develop a safe, convenient, and continuous network of sidewalks and pedestrian paths within the city.
- **T-2:** Ensure that all transportation improvements—roadway, transit, bicycle, and pedestrian—are designed and constructed according to Americans with Disabilities Act standards. Improve existing facilities so they are compliant with American Disability Act standards.
- **T-3:** Encourage provision of bicycle facilities such as weather protected bicycle parking, direct and safe access for pedestrians and bicyclists to adjacent bicycle routes and transit stations, showers and lockers for employees at the worksite, secure short-term parking for bicycles, etc.
- **T-6:** Maintain LOS standards for intersections for AM and PM peak periods as shown in Figure 4-2.
- **HS-17:** Synchronize traffic signals between El Camino Real, Sneath Lane, Huntington Avenue, and San Bruno Avenue, to improve traffic flows into and out of the San Bruno BART Station.
- **HS 19:** Should Caltrans vacate El Camino Real as a State highway, reconfigure the roadway to include wide sidewalks, streetscaping, and marked bicycle lanes. Consider various alternative configurations of traffic flow.
- **T-23:** Implement Parking Guidance System to guide motorists to parking locations in commercial areas.
- **T-34:** Comprehensively review and revise parking standards for new office and commercial development providing alternative transportation measures (i.e., vanpool, shuttle service, bicycle storage).
- **T-39:** Encourage parking lot access from non-residential side streets in order to minimize interruption to traffic flow on primary streets (San Bruno Avenue east of El Camino Real and along El Camino Real).
- **T-40:** Consider reduced parking standards within transit corridors and station areas in recognition of their proximity to high frequency transit service, mix of land uses, and walkable environment.
- **T-41:** Allow joint use of parking facilities when nearby uses have staggered peak periods of demand.
- **T-42:** Do not allow parking lots to dominate the frontage of mixed-use streets, interrupt pedestrian routes, or negatively impact surrounding neighborhoods. installing additional street trees, lighting, signage, and widening sidewalks along streets adjacent to these stations.
- **T-48:** Incorporate a dedicated pedestrian crossing and flashing street markers at the new four-way signal installed on El Camino Real connecting The Crossing with The Shops at Tanforan and the San Bruno BART station.

- **T-51:** Publicize all routes that provide non-auto access to the BART and Caltrain station areas, such as the GAP Inc. shuttle, bicycle routes, etc.
- **T-75:** Link sidewalks directly to building entrances. Avoid routes through parking lots or at the rear of residential developments.
- **T-76:** Require construction of sidewalks at least five (5) feet wide along newly built streets within San Bruno, and four (4) feet wide on older streets to preserve street character in older neighborhoods.
- **T-80:** Install safety improvements for pedestrian crossings along El Camino Real. Such improvements may include bulb-outs at the corners, crossing medians, and signal synchronization.

Impacts and Mitigation Measures

Significance Criteria

Based on CEQA *Guidelines* Appendix G, a project would cause a significant impact on transportation and traffic if it would:

- a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 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.
- 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. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The City of San Bruno has adopted standards of significance for evaluating traffic impacts. These standards indicate a traffic impact would be classified as significant if the introduction of the proposed project would:

- Cause peak hour intersection operations to deteriorate from an acceptable level of service (LOS D or better) to an unacceptable level of service (LOS E or LOS F); or,
- Exacerbate unacceptable operations by increasing the average critical delay by four seconds or more at an intersection operating at LOS E or LOS F.

The El Camino Real at I-380 Westbound Ramps and El Camino Real at I-380 Eastbound Ramps intersections are under the jurisdiction of Caltrans. According to Caltrans' *Guide for the Preparation of Traffic Impact Studies* (2002), Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, but Caltrans acknowledges that this may not always be feasible. The Caltrans Guide goes on to say that if an existing State highway facility is operating at worse than the appropriate target LOS, the existing measure of effectiveness (i.e., vehicle delay at intersections) should be maintained. Because El Camino Real (SR 82) is a predominantly signalized, heavily-traveled, road, and in order to provide consistency with the above-described City of San Bruno standards, LOS D is considered the appropriate target LOS for these State highway intersections.

Impacts Not Further Evaluated

Due to the nature of the project, there would be no impacts related to the following criterion; therefore, no impact discussion is provided for this topic for the reasons described below:

- **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that result in substantial safety risks.** The proposed project site is located approximately 1.5 miles from San Francisco International Airport (SFO). The development of the proposed project would not introduce tall objects or structures that represent an obstruction to safe air navigation. The proposed project would not affect aircraft flight paths, arrival and departure procedures, or air traffic patterns at SFO. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase in the severity of previously-identified significant effects or introduce a new significant environmental effect.

Approach to Analysis

The transportation impacts of the proposed Specific Plan Amendment are discussed below. First, the method used to estimate the amount of traffic added to the roadway system by a project proposed under the amendment is described. Then, the results of the intersection levels of service calculations with the project conditions are presented under existing plus project and cumulative conditions. The project's impacts to alternative modes of transportation (i.e., transit, bicycles and pedestrians), traffic safety, and access are also discussed.

The amount of traffic associated with a project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amount of traffic entering and exiting the site is estimated. In the second step, the directions the trips use to approach and depart the site are projected. The trips are then assigned to specific street segments and intersection turning movements in the third step.

Analysis Scenarios

The following scenarios are analyzed in this section:

- Existing + Proposed Project
- 2030 Cumulative Baseline
- 2030 Cumulative + Proposed Project

Project Trip Generation

The project consists of a 152-room hotel with approximately 3,000 square feet of meeting space to accommodate large gatherings for meetings and/or conference-related events. Traffic trip generation was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition (ITE, 2012), using the “Hotel” land use category (310). By definition, the manual states hotels “are places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, cocktail lounges; meeting and banquet rooms or convention facilities; limited recreational facilities; and/or other retail and service shops.” In general, this manual provides guidance on estimating traffic generation for various land use development based on observations conducted across the United States. While transportation conditions likely vary among these locations, hotels surveyed in the ITE manual were primarily located outside of central business districts in suburban areas. Thus, these national rates used in generating project trips represent a conservative estimate for auto trips and account for trips generated by the number of hotel rooms proposed.

Because the project would provide, as part of a transportation demand management (TDM) program, two shuttle buses that would operate between the project site, the San Bruno Bay Area Rapid Transit (BART) Station, and San Francisco International Airport, that TDM program would result in a reduction in estimated peak-hour project vehicle trips. Based on a survey of hotels in the vicinity of San Francisco International Airport, this analysis assumes that 25 percent of hotel guests would arrive at and depart from the hotel by airport shuttle.³ Because the proposed project would be located less than 0.50 mile from the BART station, and because the shuttle would also serve the BART station, it is reasonable to assume that some employees of the proposed project would also utilize shuttle buses provided by the project. Given that hotel guests would make a much larger share of trips to and from the project site than would the hotel’s approximately 30 employees, and that hotel employees would not necessarily arrive for work or depart from work during morning and afternoon peak hours owing to the 24-hour-a-day operation of the proposed project, the same 25 percent reduction in trip generation is applied to peak-hour travel.

Table 4.C-3 shows the trip generation analysis for the project. For an entire weekday the project is expected to result in an additional 931 vehicle trips on area roads. Additionally, based on these estimates and applying appropriate trip reductions, the project would generate approximately 61 a.m. peak-hour trips and approximately 68 p.m. peak-hour trips.

Project distribution and trip assignment were based on typical travel behavior for vehicles generated by a hotel-type land use, as well as the prevailing travel patterns in proximity of the project site, locations of complementary land uses, and the project’s location relative to the San Francisco International Airport. Patrons of the proposed project (i.e., hotel guests) would generally be traveling from greater distances in order to access the project site and would likely

³ A telephone survey was conducted in April 2015 of 43 hotels in San Bruno, Millbrae, South San Francisco, and Burlingame served by shuttle to and from San Francisco International Airport. Responses were received from 20 hotels, or 47 percent of the survey total. The average estimated percentage of weekday guests arriving by airport shuttle was 40 percent. For purposes of a conservative analysis, this EIR assumes that 25 percent of The Crossing Hotel guests would arrive by airport shuttle.

**TABLE 4.C-3
 PROJECT TRIP GENERATION**

Project Land Use	ITE Code	Units ^a	Daily		A.M. Peak Hour			P.M. Peak Hour				
			Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Hotel	310	152	8.17	1,242	0.53	48	33	81	0.60	47	44	91
<i>25 percent TDM Reduction (Shuttle Program)</i>				-311		-12	-8	-20		-12	-11	-23
Total Vehicle Trips				931		36	25	61		35	33	68

a. Units represent the number of hotel rooms. As defined by ITE, these rates also account for the proposed meeting space within at the proposed hotel.

SOURCE: Institute of Transportation Engineers, 2012; ESA, 2015.

choose more regionalized roadways (i.e., I-280, I-380, U.S. 101) than local streets in order to access the project site. Moreover, because the project would generate visitors to the area that would presumably be unfamiliar with the surrounding roadway network, they would generally choose to remain on major roadways that are more recognizable rather than local streets that are more familiar to city residents and workers. Also, for patrons traveling to and from the San Francisco International Airport, such project-related trips would generally utilize I-380 as well as other nearby roadways (El Camino Real and San Bruno Avenue) in order to access the project site. It is reasonable to assume that the majority of employees (whom would presumably be more familiar with the surrounding area than hotel guests) would utilize El Camino Real and other surface-level roadways in order to access the project site. However, it is noted that based on nearby population densities and the project site’s proximity to nearby freeway access ramps, the analysis also assumes that a portion of employees would also utilize various freeways (i.e., I-280, I-380, and U.S. 101) in order to access the project site.

As such, based on reasonable assumptions of traveler behavior of employees and patrons accessing the project site, the trip distribution and assignment of project-generated traffic were identified and assigned to the surrounding roadway network. The project trip distribution percentages are summarized in **Table 4.C-4** below.

**TABLE 4.C-4
 PROJECT TRIP DISTRIBUTION PERCENTAGES**

	Vehicle Trip (%)
U.S. 101 – north of I-380	15
U.S. 101 – south of I-380	
<i>Utilize I-380 via U.S. 101</i>	20
<i>Utilize San Bruno Avenue via U.S. 101</i>	5
I-280 – north of I-380 (utilize Sneath Lane)	5
I-280 – south of I-380	5
El Camino Real – south of I-380	25
El Camino Real – north of I-380	25
Total Trips	100%

SOURCES: ESA, 2013.

For trip assignment purposes, it was assumed that the vast majority of project-related traffic would access the project site via a new full access driveway located in the northern boundary of the project site (the driveway would be a southerly extension of Admiral Court [which currently dead-ends at the project site]). Vehicles would access the project driveway via Commodore Drive and would access Commodore Drive via adjacent roadways: Sneath Lane and El Camino Real. As presented in Table 3.16-3, above, the majority of project-related traffic would utilize El Camino Real (via U.S. 101, I-380, and by those traveling along I-280, south of San Bruno Avenue) to access Commodore Drive and then to access the project driveway. Other project-related traffic would utilize Sneath Lane (via I-280, north of the I-380 junction) in order to access Commodore Drive and then access the project driveway. **Figure 4.C-2** presents the Existing plus Project traffic volumes during the weekday a.m. and p.m. peak hours.

As shown in **Table 4.C-5** the study intersections would continue to operate at acceptable service levels (LOS D or better). Detailed LOS output sheets are located in Appendix E. The project impact would be less than significant. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase the severity of previously-identified significant effects or introduce a new significant environmental effect.

**TABLE 4.C-5
 EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS)^a**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
1. El Camino Real / Sneath Lane	Signalized	25.2	C	40.7	D
2. El Camino Real / Commodore Drive	Signalized	12.4	B	21.1	C
3. El Camino Real / I-380 Westbound Ramps	Signalized	19.7	B	38.2	D
4. El Camino Real / I-380 Eastbound Ramps	Signalized	8.3	A	10.6	B

a. LOS calculations performed using Synchro and the 2000 *Highway Capacity Manual* operations analysis methodology.
 SOURCE: ESA (2014).

Freeway Segments. According to the City and Council Association of Government’s (C/CAG) *San Mateo County Congestion Management Program* (2011), freeway segments to which a project is projected to add trips equal to or greater than one percent of the freeway segment’s capacity would be considered a significant impact. Based on the number of trips generated by the proposed project and the dispersion of project traffic along I-280, I-380, and U.S. 101, the proposed project would not add more than one percent of capacity to any study freeway segment; therefore, potential adverse effects to existing freeway segment capacities from the proposed project would be less-than-significant. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase the severity of previously-identified significant effects or introduce a new significant environmental effect.

Furthermore, the anticipated increase in peak-hour traffic associated with the proposed project would not result in adverse effects to freeway segment LOS conditions, as project-related trips would not result in an increase in volume-to-capacity ratios along affected freeway segments.⁴ Based on these findings, project impacts to freeway segments would be less than significant. The capacities and service levels of affected freeway segments and the estimated number of project trips added to each segment are presented in Appendix E.

Impacts Analysis

Construction Impacts

Impact 4.C-1: Construction activities associated with the construction of a hotel allowed under the Specific Plan Amendment could potentially result in temporary circulation impacts on the street system. (Less than Significant)

Project construction activities would generate off-site traffic that would include the initial delivery of construction vehicles and equipment to the project site, the daily arrival and departure of construction workers, and the delivery of materials throughout the construction period and removal of construction debris. Approximately 22,547 cubic yards (cy) of soil would be exported from the site in 10 cy trucks. This would require approximately 2,255 truck loads, or approximately 4,510 truck round trips during construction. Assuming excavation would occur over an 8-hour day for one month (22 work days), this would amount to approximately 26 truck trips per hour (i.e., one every 2 to 3 minutes). While noticeable to persons in the vicinity, that level of traffic would be lower than that for project operations, as described above. For that reason, this would not be a sufficient volume to adversely affect levels of service at nearby intersections.

Deliveries would generally include shipments of concrete, lumber, and other building materials for onsite structures, utilities (e.g., plumbing equipment and electrical supplies) and paving and landscaping materials. Construction activity would occur Monday through Friday between 7:00 a.m. and 7:00 p.m. in accordance with all applicable municipal codes. No weekend construction would occur, unless permitted by the City of San Bruno.

Construction-related activities could include disruptions to the circulation system in and around the project site and surroundings, which may include temporary lane closures and sidewalk closures along adjacent streets. Traffic generated from construction activities would be temporary and spread over about 18 months, and therefore, would not result in any long-term degradation in operating conditions on roadways in the project locale. Moreover, daily and peak-hour traffic generated by construction activities would be lower in volume than that for project operations, as described above. The impact of construction-related traffic would be a temporary and intermittent

⁴ Per C/CAG CMP standards, if implementation of project results in an increase in freeway segment volume-to-capacity (v/c) ratio of one percent or more along freeway segments that are currently exceeding designated LOS standards, the project would result in significant impact. As shown in C/CAG's CMP (2011), select freeway segments along I-280 are currently exceeding the designated LOS D standard, operating at unacceptable LOS F conditions. However, as presented in Appendix E, peak-hour traffic from the proposed project would not increase the v/c ratios along segments of I-280 that are currently operating poorly; therefore, the project would not result in a significant impact.

lessening of the capacities of streets in the project site vicinity because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. However, given the proximity of the project site to regional roadways (i.e., U.S. 101, I-280, I-380, and El Camino Real), construction trucks would have relatively direct routes.

As such, implementation of a construction management plan, required as part of construction permits, which is reviewed and approved by the City, would reduce the potential temporary construction traffic impacts to less-than-significant levels. With implementation of this mitigation, this is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase the severity of previously-identified significant effects or introduce a new significant environmental effect.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Operational Impacts

Existing plus Project Conditions

Impact 4.C-2: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially increase traffic at local intersections in the project vicinity. (Less than Significant)

The Specific Plan EIR evaluated a 500-room hotel on 5.5 acres. As part of this project, the City of San Bruno would amend the *U.S. Navy Site and its Environs Specific Plan* for The Crossing Hotel Site and modify the maximum hotel size allowable on the project site from 500 rooms to 152 rooms (on 1.5 acres). The Specific Plan EIR found no transportation impacts related to increased traffic volumes at intersections.

A new transportation analysis was conducted for the revised project (proposed project) and is presented above. Based on the analysis presented above, the proposed project would generate substantially less traffic than the Specific Plan project solely based on magnitude; however, the operating conditions of nearby intersections are different given that all but this parcel of the Specific Plan Area are built out.

With completion of the Specific Plan project, the intersection of El Camino Real at Sneath Lane was projected to operate at LOS B during the a.m. peak hour and LOS C during the p.m. peak hour. El Camino Real at Commodore Avenue was projected to operate at LOS C during the a.m. peak hour and LOS D during p.m. peak hour. Under the proposed project [152 rooms], the intersections are projected to continue to operate acceptably (LOS D or better). Given that the City's significance threshold for intersection operations is degradation of operations from LOS D or better to LOS E or worse, this would not be considered a new or substantially more severe impact.

However, with completion of the Specific Plan project, the intersection of El Camino Real at the I-380 Eastbound Ramp was projected to operate at LOS A during both peak hours, and El Camino Real at the I-380 Westbound Ramp was projected to operate at LOS A during the a.m. peak hour and LOS B during p.m. peak hour. The projected LOS under existing plus the proposed project [152 rooms] would still operate acceptable, but the intersection of El Camino Real at the I-380 Westbound Ramp during the p.m. peak hour would operate at LOS D. However, given that the City's significance threshold for intersection operations is degradation of operations from LOS D or better to LOS E or worse, this would not be considered a new or substantially more severe impact.

The findings of the project-specific transportation analysis found that although the proposed project would include changes to the previous EIR in terms of the project description (land use types and sizes), it would not generate a substantial increase in the severity of previously identified significant effects related to the performance of the roadway network that could not be mitigated to a less than significant level.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.C-3: Construction and operation of a hotel allowed under the Specific Plan Amendment would not increase hazards due to a design feature or incompatible uses. (Less than Significant)

The proposed project would not alter the layout of adjacent streets and would not introduce unsafe design features or incompatible uses into the area. The project site plan and circulation would be subject to final review and approval by the City of San Bruno Planning Commission and Public Services Department to ensure proposed improvements do not include potentially hazardous design features. The physical and traffic characteristics of area roadways (e.g., traffic signals, pedestrian sidewalks, and bicycle routes) would safely accommodate project-generated traffic. The proposed project's effect on traffic safety would be less than significant. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase in the severity of previously-identified significant effects or introduce a new significant environmental effect.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.C-4: Construction and operation of a hotel allowed under the Specific Plan Amendment would not result in inadequate emergency access. (Less than Significant)

The road network serving the project site currently accommodates the movements of emergency vehicles that travel in the area. In the event of an emergency, vehicles would be able to access the project site in the same manner as under existing conditions.

Further, the project configuration would not introduce any physical barriers that would restrict emergency vehicle access. The proposed project would include one driveway for vehicular ingress/egress to the project site, located along the northern boundary of site (as a southerly extension of Admiral Court). Another driveway (for emergency vehicles only) would be located along the southwest portion of the site (along Mariner Drive). The proposed project would not restrict emergency vehicles from accessing neighboring buildings. As a result, the proposed project would have adequate emergency access to and from the site, and the impact would be less than significant. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase in the severity of previously-identified significant effects or introduce a new significant environmental effect.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Impact 4.C-5: Construction and operation of a hotel allowed under the Specific Plan Amendment would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (Less than Significant)

The project site is located in an established urban area, and development of the project would not directly or indirectly eliminate alternative transportation corridors or facilities (e.g., bicycle lanes, bus routes/stops, pedestrian pathways, etc.). The project site is served by alternative modes of transportation, including transit, bicycle, and pedestrian facility services. As described under criterion a), SamTrans operates fixed-route bus service in proximity to the project site, and there is a bus stop (for multiple bus lines) approximately 0.20 mile (1,100 feet) north of the site. In addition, the San Bruno BART station is located about 0.35 mile from the site. Assuming that the average person walks at approximately three feet per second⁵, this distance equates to an approximate six- to ten-minute walk between nearby bus transit stops/BART station and the project site; which would be a reasonable walking distance for employees and patrons.

The Specific Plan EIR presented **Mitigation Measure D.4**, which requires that substantial project development would require a site-specific analysis to ensure that adjacent pedestrian and bicycle facilities were assessed as development occurred. The analysis presented herein implements that

⁵ Standard transportation planning practice to evaluate pedestrian facilities includes an average walking speed of three feet per second (Institute of Transportation Engineers, *Transportation Planning Handbook*, 2nd Edition, 1999).

mitigation measure. As described under criterion a), there are several planned bicycle and pedestrian improvements in proximity to the project site; however, the proposed project would not permanently change the existing or planned transportation network in the project vicinity or throughout the City. Therefore, the proposed project would not conflict with policies, plans, or programs related to transit, bicycle, or pedestrian travel. This is the same finding as the proposed project in the Specific Plan EIR, and the effects of the proposed project would not increase in the severity of previously-identified significant effects or introduce a new significant environmental effect.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

Cumulative Impacts

Cumulative (2030) Plus Project Conditions

Impact 4.C-6: Construction and operation of a hotel allowed under the Specific Plan Amendment could potentially contribute to cumulative increases in traffic at local intersections in the project area in 2030. (Less than Significant)

Cumulative (2030) condition traffic volumes were developed using annual traffic growth factors derived from future forecasted volumes provided in the *Transit Corridors Plan Draft Environment Impact Report*, which were based on buildout of the San Bruno General Plan, as presented in the General Plan EIR, the *San Bruno Caltrain Grade Separation and New Station Traffic Impact Analysis* report and other studies (San Bruno, 2012). For purposes of this analysis, existing conditions traffic volumes at each of the four study intersections were extrapolated using the same growth rates as applied in the Transit Corridors Plan EIR to derive the cumulative conditions traffic volumes. **Figures 4.C-3 and 4.C-4** present the cumulative traffic volumes (without and with the Project, respectively) during the weekday a.m. and p.m. peak hours.

According to the City of San Bruno Capital Improvement Program 2013 – 2018 (CIP), no physical changes to the lane geometries or traffic controls are planned at the four study intersections or affected roadways. As presented in the CIP, the two-phase *Transit Corridor Pedestrian Connection Improvement Project* would include the installation of street trees, irrigation systems, bus benches, pedestrian way finding signage, and recycling/trash receptacles as well as the installation of curb ramps and pedestrian crossings along El Camino Real, San Bruno Avenue, and Huntington Avenue. Phase 1 (accessible curb ramps, sidewalk repair, and the planting of street trees) was completed in early 2013, and construction of Phase 2 (currently under design), now that the San Bruno Caltrain Grade Separation is completed (April 2014), has not been scheduled [*To Be Updated*] (City of San Bruno, 2014).

As shown in **Table 4.C-6**, below, the study intersections would operate at acceptable service levels (LOS D or better) under Cumulative (no project) Conditions.

**TABLE 4.C-6
 CUMULATIVE (2030) PEAK-HOUR INTERSECTION LEVELS OF SERVICE (LOS)^a**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
1. El Camino Real / Sneath Lane	Signalized	26.5	C	50.1	D
2. El Camino Real / Commodore Drive	Signalized	11.9	B	25.1	C
3. El Camino Real / I-380 Westbound Ramps	Signalized	19.9	B	49.4	D
4. El Camino Real / I-380 Eastbound Ramps	Signalized	7.7	A	10.8	B

a. LOS calculations performed using Synchro and the 2000 Highway Capacity Manual operations analysis methodology. SOURCE: ESA (2014).

As shown in **Table 4.C-7**, the study intersections would continue to operate at acceptable service levels (LOS D or better) under Cumulative plus Project conditions. Also of note, a larger version of The Crossing Hotel project that is proposed with the Specific Plan Amendment analyzed herein (200 rooms) was assumed as part of the projected traffic volumes for the Transit Corridors Plan, and therefore, adding project-generated trips on top of the cumulative without project volumes provides a conservative analysis of the project’s cumulative impact. Therefore, the project impact would be less than significant. Detailed LOS output sheets are located in Appendix E.

**TABLE 4.C-7
 CUMULATIVE (2030) PLUS PROJECT PEAK-HOUR
 INTERSECTION LEVELS OF SERVICE (LOS)^a**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
1. El Camino Real / Sneath Lane	Signalized	26.6	C	50.6	D
2. El Camino Real / Commodore Drive	Signalized	13.7	B	26.0	C
3. El Camino Real / I-380 Westbound Ramps	Signalized	19.8	B	50.7	D
4. El Camino Real / I-380 Eastbound Ramps	Signalized	7.7	A	10.8	B

a. LOS calculations performed using Synchro and the 2000 Highway Capacity Manual operations analysis methodology. SOURCE: ESA (2014).

Based on the results presented above, project-generated vehicle trips would not contribute in a considerable (significant) way to cumulative (2030) conditions at the study intersections during the a.m. and p.m. peak hours. Therefore, the project would result in a less-than-significant cumulative impact, and no mitigation measures are required.

Mitigation: None required.

Comparison to 2001 EIR Findings: No New or Substantially More Severe Impact.

References

- Bay Area Rapid Transit (BART), 2014. Monthly Ridership Reports, available online at: <http://www.bart.gov/about/reports/ridership.aspx>; accessed May 2014.
- California Department of Transportation (Caltrans), 2002. *Guide for the Preparation of Traffic Impact Studies* (December 2002).
- California Department of Transportation (Caltrans), 2014. *2013 Traffic Volumes on California State Highways*, available online at <http://traffic-counts.dot.ca.gov/index.htm>; accessed September 2014.
- Caltrain, 2014. February 2013 Caltrain Annual Passenger Counts Key Findings, available online at: <http://www.caltrain.com/about/statsandreports/Ridership.html>; accessed May 2014.
- Environmental Science Associates (ESA), telephone survey of airport-area hotels, April 27-28, 2015.
- Institute of Transportation Engineers (ITE), 1999. *Transportation Planning Handbook*, 2nd Edition, 1999.
- Institute of Transportation Engineers (ITE), 2012. *Trip Generation Manual*, 9th edition, 2012.
- San Bruno, City of, 2009. City of San Bruno *General Plan*, adopted March 24, 2009.
- San Bruno, City of, 2012. *Transit Corridors Plan Draft Environment Impact Report*, March 2012, available online at: http://www.sanbruno.ca.gov/comdev_images/redevelopment/Transit%20Corridors%20Plan/tcp_Documents.html; accessed July 2013.
- San Bruno, City of, 2013. City of San Bruno Capital Improvement Program 2013 – 2018, available online at: http://sanbruno.ca.gov/pw_proj_current.html; accessed May 2014.
- San Mateo Transit District (SamTrans), 2014. Schedules and Maps, available online at <http://www.samtrans.com/schedulesandmaps/timetables>; accessed May 2014.
- Transportation Research Board (TRB), 2000. *Highway Capacity Manual*, December 2000.

CHAPTER 5

Alternatives to the Project

A. Introduction

CEQA *Guidelines* §15126.6 requires that an EIR describe and evaluate a range of reasonable alternatives to the project or to the location of the project that could avoid or substantially lessen any of the significant effects of the project and feasibly attain most of its basic objectives. The CEQA Guidelines further require discussion of the “No Project” Alternative.

The CEQA *Guidelines* generally define “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable amount of time, taking into account economic, environmental, social, technological, and legal factors. In addition, the following may be taken into consideration when assessing the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (CEQA *Guidelines* § 15126.6(f)(1)). As stated in § 15126.6(f)(3) of the CEQA *Guidelines*, “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.”

The requirement that an EIR evaluate alternatives to the proposed project, or alternatives that address the location of the proposed project, is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained while reducing the magnitude of, or avoiding, the environmental impacts of the proposed project. The description or evaluation of alternatives does not need to be exhaustive. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project.

CEQA requires that an environmentally superior alternative be selected among the alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts on the project site and its surrounding environment. When the “No Project” Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA *Guidelines* §15126.6 (e)(2).)

The purpose of this chapter is to describe and evaluate the alternatives to the hotel, as proposed. The alternatives were developed to reduce or eliminate the potentially significant adverse environmental effects that would result from implementation of the proposed project as identified in Chapter 4 of this Supplemental EIR.

B. Alternatives in the 2001 Draft EIR

The Specific Plan EIR analyzed the following two alternatives to the Specific Plan:

1. The No Project Alternative, which assumed the Specific Plan would not be adopted. The land use control of the sites would have remained subject to the approved Redevelopment Project Area Plan, the 1984 General Plan and the zoning ordinance. Residential development would not have been permitted under the land use controls at the time. The hotel would have been permitted.
2. Development Allowed Without Voter Approval would have allowed the same general land uses as the Specific Plan, however, the land use intensity would be restricted by building heights that could not exceed three stories or 50 feet in height.

Two additional alternatives that were considered, but were determined to be infeasible. A less intense development alternative was dismissed because the approved Redevelopment Project Area Plan, the 1984 General Plan and the zoning ordinance at the time of adoption of the Specific Plan would not have controlled the large-scale development that could occur at the U.S. Navy Site. Also considered, was the reuse of the buildings that occupied the site. This alternative was rejected because the buildings on the site would not support the amount of development anticipated by the San Bruno Redevelopment Project Area Plan.

Relationship of Proposed Project to Alternatives in the Specific Plan EIR

The No Project Alternative and the Development Allowed Without Voter Approval Alternative, analyzed in the Specific Plan EIR, assumed that the land use would be controlled by planning documents that were in effect at the time of the adoption of the Specific Plan. As such, neither alternative would directly apply as the 1984 General Plan has been superseded and the Specific Plan now provides land use control on the project site. In addition, the overall Crossing site is almost entirely built out.

C. Factors in the Selection of Alternatives

The CEQA *Guidelines* recommend that an EIR briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency's determination (CEQA *Guidelines* § 15126.6(c)). The following factors were considered in identifying the reasonable range of alternatives to the project for this EIR:

- The extent to which the alternative would accomplish most of the basic goals and objectives of the project;
- The extent to which the alternative would avoid or lessen the identified significant and/or unavoidable environmental effects of the project;

- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which an alternative contributes to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a No Project Alternative and to identify an “environmentally superior” alternative in addition to the No Project Alternative (CEQA *Guidelines* § 15126.6 (e)).

Project Objectives

As discussed in Chapter 3 of the EIR, the following are the identified from the 2001 Specific Plan EIR:

- 1) Establish a physical plan for the gradual transition of the Specific Plan area to urban uses near major transportation corridors that support the area’s intended transportation/transit role
- 2) Establish land uses that help assure long-term economic vitality and sustainability for the City;
- 3) Establish policies and guidelines that encourage a comprehensive new development and reuse of the U.S. Navy Site to complement and enhance existing uses in a consolidated and more economically efficient land use pattern;
- 4) Implement design and development standards to create a visually attractive gateway development based upon the principles of a pedestrian-friendly, Transit-Oriented Development (TOD)
- 5) Develop job opportunities that are transit accessible
- 6) Create environmentally sensitive development
- 7) Facilitate realistic development that can be expeditiously implemented.

The objectives specific to this project are to:

- 1) Further the goals and policies of the U.S. Navy Site Specific Plan
- 2) Develop a hotel that will attract regional, national, and international visitors due to its proximity to San Francisco International Airport, I-380 and US 101
- 3) Complement existing retail, recreation and visitor-serving land uses in the vicinity

D. Description and Analysis of Alternatives

The following analysis examined alternatives to the hotel site (i.e., the site of the proposed Specific Plan amendment. A description of each alternative is followed by a discussion of its impacts and how the alternative would differ from the impacts of the proposed project. The following two alternatives are evaluated in this chapter of the Draft Supplemental EIR:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Development Alternative

As permitted by CEQA, the significant effects of the alternatives are discussed in less detail than are the effects of the proposed project (CEQA *Guidelines*, § 15126.6(d)). However, the analysis is conducted at a sufficient level of detail to provide decision-makers adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review, should that be the desire of the decision-makers if the proposed project is not approved.

Unless otherwise indicated, the impacts associated with the proposed project and with the alternatives addressed would be for full buildout conditions.

Alternative 1 – No Project Alternative

Consideration of a No Project Alternative is required under CEQA. Since the project is the amendment of Specific Plan EIR, the No Project Alternative would construct the project as originally proposed under the Specific Plan, which allows for a 500-room hotel on 5.5 acres. Due to the neighboring development, the hotel site is no longer large enough to support a 500-room hotel and it would not be feasible to construct the No Project Alternative. Therefore, the No Project Alternative analysis examines the conditions under which no hotel would be built. Under this alternative, no development of the hotel would occur at the site. No changes to the site would take place and the site would remain a vacant lot. No new landscaping would be added to the site. While the site might ultimately be developed at some time in the future, it would be speculative to forecast the nature of such development. Accordingly, this alternative assumes that the project site would remain vacant for the foreseeable future.

Impacts

The following sub-sections briefly describe environmental impacts associated with the No Project Alternative. It is noted that, with the exception of Air Quality, Greenhouse Gas Emissions, and Transportation, the evaluation of the impacts below with respect to the proposed project is contained in the Initial Study included in **Appendix C** of this Draft Supplemental EIR.

Air Quality and Greenhouse Gas Emissions

With the No Project Alternative, there would be no construction-related emissions, nor would there be any operation-related emissions.

Biological Resources

No potential impacts to nesting birds (including construction-related noise impacts) would occur with the No Project Alternative. In addition, no potential impacts due to bird strikes associated with building windows and night lighting would occur.

Cultural and Historic Resources

With the No Project Alternative there would be no ground disturbance, so there would be no potential impacts related to the discovery of previously unknown archaeological or paleontological resources.

Hazards and Hazardous Materials

There would be no potential disruption to contaminated soils or nor any remediation of contaminated soils prior to construction. No hazardous materials would be located on the project site, including everyday compounds used for cleaning and maintenance.

Hydrology and Water Quality

No changes in runoff water quality would occur with the No Project Alternative. The site would remain unpaved and no new landscaping would occur. As such, no construction-related or operational water-quality impacts would occur.

Public Services

With no new project, there would be no impact regarding an increase in demand for public services.

Public Utilities and Service Systems

With no new project, there would be no impact regarding an increase in demand for public utilities and service systems.

Transportation

No increased trips associated with the proposed project would occur. The project would not contribute to overall cumulative traffic growth in the area or peak hour trips. No new parking would occur on the site, and no new egress/ingress issues would occur.

Noise

No changes in noise levels would occur with the No Project Alternative. Specifically, construction noise would not occur.

Other Issues

Other issues were found to entail less than significant impacts in the Initial Study Checklist completed for the project (see Appendix C). Thus, these other topics include aesthetics, agriculture, geology and soils, land use, mineral resources, population and housing, and recreation.

Ability to Meet Project Objectives

The No Project Alternative would not meet any of the applicant's objectives.

Alternative 2 – Reduced Development Alternative

This alternative would propose a smaller hotel with 12 fewer rooms than the proposed project, for a total of 140 rooms. Other facilities, such as the food service and conference/banquet/event space, would be developed as with the proposed project. The reduction in hotel rooms would reduce potential air quality and GHG emissions which are assessed by modeling the estimated daily emissions generated by project construction and project operations based on the size of the hotel.

Impacts

Air Quality and Greenhouse Gas Emissions

Under the Reduced Development Alternative, the amount of development would be incrementally less as described for the proposed project resulting in approximately 5 percent less air emissions in the project area compared to that of the proposed project both during construction and operation, assuming other hotel facilities would be the same as with the proposed project. Mitigation Measures H.2, H.1.a and 4.A-3 would apply to the alternative. In addition, compliance with the Specific Plan Amendment's conservation standards, operational GHG emissions associated with the project would be reduced below the BAAQMD threshold of significance.

Biological Resources

The Reduced Development Alternative would include a similar level of development as the proposed project. Biological Resource impacts from this alternative would be similar to the proposed project. As with the proposed project, implementation of Mitigation Measure G.1.b would reduce potential impacts to nesting birds and bats from construction activity to a less-than-significant level. Mitigation Measure G.1.a would reduce potential impacts to heritage trees to a less-than-significant level as described in the Initial Study (Appendix C).

Cultural and Historic Resources

The Reduced Development Alternative would include a similar level of development as the proposed project. Cultural Resource impacts from this alternative would be similar to the proposed project. As with the proposed project, implementation of Mitigation Measures N.1a and N.1b would reduce potential impacts to cultural resources during construction to a less-than-significant level as described in the Initial Study (Appendix C).

Hazards and Hazardous Materials

Under this alternative, potential impacts related to encountering contaminated soils or groundwater during excavation would be similar to the proposed project. Similar to the proposed project, implementation of Mitigation Measures L.1.d, which would require the project sponsor to submit a Phase II report to reduce potential impacts from the exposure of hazardous materials to a less-than-significant level. In addition, Mitigation Measures C.1a-c would reduce risk associated with development near an airport as described in the Initial Study (Appendix C).

Hydrology and Water Quality

Impacts to hydrology and water quality from the Reduced Development Alternative would be similar to the proposed project. Similar to the proposed project, implementation of Mitigation Measures G.2a and G.2b would require post-construction stormwater controls and Mitigation Measure G.3a would reduce construction stormwater runoff to a less-than-significant level as described in the Initial Study (Appendix C).

Transportation and Circulation

Impacts to transportation and circulation from the Reduced Development Alternative would be similar to the proposed project, although daily and peak-hour trip generation would be approximately 8 percent lower. The Reduced Development Alternative would incorporate Mitigation Measure D.4 to require a site-specific analysis to ensure that adjacent pedestrian and bicycle facilities were assessed as development occurred resulting in a less-than-significant impact.

Noise

Impacts to noise from the Reduced Development Alternative would be similar to the proposed project. Implementation of Mitigation Measures I.1 and I.3.a-c, regarding compliance with the City's Noise Ordinance and noise insulation for residential development described in the Initial Study (Appendix C) would still apply and would reduce effects to a less-than-significant level.

Public Services

Impacts to public services from the Reduced Development Alternative would be similar to the proposed project. Implementation of Mitigation Measures F.1 would reduce the impact to potential delays in emergency response due to high traffic periods and Mitigation Measure F.4 would reduce potential impact of an increase in enrollment at local schools to a less-than-significant level as described in the Initial Study (Appendix C).

Utilities and Service Systems

Impacts to utilities and service systems from the Reduced Development Alternative would be incrementally less substantial than those of the proposed project. Implementation of Mitigation Measures G.2a, G.2b, and G.3a would reduce the potential impacts from an increased use of the City's stormwater system and Mitigation Measures E.6 and E.7 would reduce impacts due to solid waste generation to a less-than-significant level as described in the Initial Study (Appendix C).

Other Issues

Under the Reduced Development Alternative, impacts related to geology, soils, and seismicity would be similar to the proposed project since the same type of construction activities would be employed within the similar but slightly reduced footprint. Impacts related to aesthetics would be similar to those of the proposed project since the Reduced Development Alternative would generate a similar amount of onsite development. Land use, population and housing, and recreation impacts would also be similar to those of the project. Lastly, as with the proposed

project, no impacts to agricultural and forest resources or mineral resources would occur. As with the proposed project, all other effects would be less than significant.

Ability to Meet Project Objectives

This alternative would substantially meet all of the above-described objectives for the project, although to an incrementally lesser degree than would the proposed project. Similar to the proposed project, this alternative would still provide a visitor-serving facility within The Crossing development as identified in the Specific Plan through the development of a hotel. The alternative project would complement existing retail, recreation and visitor-serving land uses in the vicinity, further the goals and policies of the Specific Plan, and encourage and provide economic development stimulus and redevelopment efforts at the U.S. Navy Site.

E. Environmentally Superior Alternative

A summary table showing the differences between the alternatives and the proposed project (after mitigation) is provided in **Table 5-1**.

**TABLE 5-1
COMPARISON OF IMPACTS OF PROJECT ALTERNATIVES (AFTER MITIGATION)**

Environmental Issue Area	Proposed Project	ALT 1 No Project	ALT 2 Reduced Development
Aesthetics	LTS	NI	LTS
Agricultural and Forest Resources	NI	NI	NI
Air Quality	LTS	NI	LTS -
Biological Resources	LTS	NI	LTS
Greenhouse Gas Emissions	LTS	NI	LTS -
Cultural Resources	LTS	NI	LTS
Geology, Soils, and Seismicity	LTS	NI	LTS
Hazards and Hazardous Materials	LTS	NI	LTS
Hydrology and Water Quality	LTS	NI	LTS
Land Use and Land Use Planning	LTS	NI	LTS
Mineral Resources	NI	NI	NI
Noise	LTS	NI	LTS -
Public Services	LTS	NI	LTS
Recreation	LTS	NI	LTS
Transportation and Circulation	LTS	NI	LTS -
Utilities and Service Systems	LTS	NI	LTS -

NOTES:

- LTS = Less than significant impact (with mitigation)
- + = Greater adverse impact than proposed project
- = Lesser adverse impact than proposed project
- NI = No Impact

SOURCE: ESA, 2014.

CEQA requires that an environmentally superior alternative be identified. The No Project Alternative is environmentally superior to the Reduced Development Alternative as it would avoid most environmental impacts of the proposed project. However, the No Project Alternative would not be consistent with the project objectives, which are presented above and in Chapter 3.

When the No Project Alternative is the environmentally superior alternative, an additional alternative must also be identified. In this case, the Reduced Development Alternative would be the environmentally superior alternative as it would meet many of the project objectives while also reducing some of the impacts identified for the proposed project related to air quality and greenhouse gas emissions. In particular, the Reduced Development Alternative would reduce impacts related to the potential for greenhouse gases, but reducing the projected the emissions below the BAAQMD recommended thresholds, and eliminating the need for additional mitigation measures related to greenhouse gases.

F. Alternatives Considered but Rejected

As part of the U.S. Navy Site Specific Plan the City explored multiple land use alternatives, including construction of office, multi-family, and commercial. This particular site, due to its proximity to the regional roadway network and international airport, was considered appropriate for hotel use. All of these other land uses are represented in the already built-out Plan Area.

Because the basic purpose of the proposed project is to guide the redevelopment of this remaining parcel on the U.S. Navy Site, an alternative site would not be appropriate as an alternative to the proposed project. Therefore, this Supplemental EIR does not include an analysis of an off-site alternative. The purpose of the project is to determine the best uses and development standards and requirements for a specific property: the remaining undeveloped lands vacated by the Navy when the federal government vacated the Plan Area. Consideration of an alternative that considers the impact of developing a different property located at some other location would have no practical use or relevance to the decisions that must be made about the development of this particular piece of property.

This page intentionally left blank

CHAPTER 6

Other Statutory Sections

A. Growth-Inducing Impacts

The CEQA *Guidelines* require that an EIR evaluate the growth-inducing impacts of a proposed action (Section 15126.2[d]). A growth-inducing impact is defined by the CEQA *Guidelines* as:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it would involve a substantial construction effort with substantial short-term employment opportunities and indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA *Guidelines* also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The proposed project does not involve construction of new housing or require a large number of new employees – permanent or during construction – that warrants new housing be constructed. While the proposed hotel would provide employment for approximately 30 employees, it is not expected to increase employment such that there would be a direct or indirect increase population nor contribute to future population growth.

Growth-inducing impacts from the project could occur if economic or population growth or the construction of new housing would be directly or indirectly fostered by the project. Examples of such impacts include major utility lines or roads extended across undeveloped lands to serve the site, or if the project would result in an increased demand for local housing or commercial services. No new utility lines would be extended to the site across undeveloped lands except for the extension of communication and utilities lines from the public right-of-way to the project buildings. No growth would be induced by the construction of these lines. No new roads would

be required to serve the proposed hotel. In addition, the site is located in San Bruno where services are easily available. The area surrounding the site is already developed.

In conclusion, the proposed project would not result in growth-inducing effects on the environment, directly or indirectly.

B. Significant Irreversible Changes

Impacts associated with a proposed project may be considered to be significant and irreversible for the following reasons:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes the removal or non-use thereafter unlikely;
- Primary impacts (e.g., removal of agricultural lands) and, particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses; and
- Irreversible damage can result from environmental accidents associated with the project.

The construction of a hotel and other site improvements would constitute an irreversible uses of these lands, as it is unlikely that the improvements would be removed. The project site has previously been developed with small structures, but has been vacant since the early 2000s. The proposed project would irretrievably commit materials to the construction and maintenance of the proposed hotel facilities. Construction of the proposed project and ongoing operations would result in the use of energy, including nonrenewable fossil fuels. The project is not expected to result in accidents that could lead to irreversible environmental damage due to the mitigation measures that have been proposed as related to hazardous materials and potential hazards.

C. Cumulative Impacts

Cumulative impacts are addressed at the end of each topic evaluated in Chapter 4 of the Supplemental EIR, and in the Initial Study for topics analyzed therein. CEQA defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impacts analysis is intended to describe the “incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.” (CEQA *Guidelines* § 15355) The analysis of cumulative impacts is a two-phase process that first involves the determination of whether the project, together with other projects, would result in a significant impact. If there would be a significant cumulative impact of all such projects, the EIR must determine whether the project’s incremental effect is cumulatively considerable, in which case, the project itself is deemed to have a significant cumulative effect. (CEQA *Guidelines* § 15130)

The cumulative impact analyses are based on existing conditions and a growth scenario that incorporates approved, pending and proposed projects within the vicinity of the project. The analysis of each environmental topic included in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR evaluates possible cumulative impacts considering these other projects. The cumulative analysis is presented in the Air Quality, Greenhouse Gas Emissions, and Transportation and Circulation analysis and evaluates potential cumulative impacts considering these other projects.

The proposed project is located in the City of San Bruno, within the U.S. Navy Specific Plan Area, and is the final parcel in the Plan Area to be buildout. Cumulative projects in the project vicinity include the redevelopment of a sit down restaurant that would consist of a 67,000-square-foot office is in the planning sections at 1250 Grundy Lane (0.25 miles from the project site) and the construction of a mixed use project at 406-418 San Mateo Avenue (0.9 miles from the project site). The Transit Corridors Plan Area includes downtown San Bruno, historically focused on San Mateo Avenue, as well as adjacent principal streets, including El Camino Real, San Bruno Avenue, and Huntington Avenue. The Transit Corridors Plan objective is to facilitate future improvement of the Transit Corridors Area by establishing a clear vision and development framework, associated development standards and design guidelines for public and private realm improvements, and a combination of related transportation and infrastructure improvements and other implementation strategies.

The cumulative analysis found in Chapter 4 identified potentially significant cumulative impacts related to health risks from diesel particulate matter that would be reduced to less than significant with implementation of identified mitigation.

D. Significant and Unavoidable Environmental Impacts

Section 21100(b)(2)(A) of CEQA requires an EIR to identify significant environmental effects that cannot be avoided if a project is implemented. All of the impacts of the project either would be less than significant or would be mitigated to a less-than-significant level. No impacts would remain significant and unavoidable after mitigation.

References

City of San Bruno, *San Bruno General Plan*, adopted March 29, 2009.

San Bruno, City of, *U.S. Navy Site and Its Environs Specific Plan Final Environmental Impact Report*, December 29, 2000.

This page intentionally left blank

CHAPTER 7

Report Preparers

Report Authors

Lead Agency

City of San Bruno

Mark Sullivan
City of San Bruno
567 El Camino Real
San Bruno, CA 94066

Consultants

Environmental Science Associates

Karl Heisler	Project Director
Lesley Lowe, AICP CTP	Project Manager
Erin Higbee-Kollu	Deputy Project Manager
Lesley Lowe, AICP CTP	Traffic and Transportation
Jack Hutchison, P.E.	Traffic and Transportation
Eric Schniewind	Geology, Hydrology and Water Quality; Hazards and Hazardous Materials
Rachel Danielson	Biological Resources
Brad Brewster	Cultural and Historic Resources
Heidi Koenig	Cultural and Historic Resources
Matt Morales	Air Quality, Noise, and Greenhouse Gas Emissions
Tim Rimpo	Air Quality and Greenhouse Gas Emissions
Vanessa Thompson	Planning and Infrastructure
Ron Teitel	Graphics
Lisa Bautista	Word Processing

This page intentionally left blank