Initial Study/Mitigated Negative Declaration

Waters Office Park Residential Project

PA18-013

Prepared by

CITY OF SAN MATEO CALIFORNIA

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

November 2018

CITY OF SAN MATEO
Mitigated Negative Declaration

Pursuant to Section 21000 et seq of the Public Resources Code and the City of San Mateo Environmental Review Guidelines and Procedures, a Negative Declaration is hereby granted for the following project:

1. Project Title and Number: Waters Office Park Residential Project, PA18-013

2. Lead Agency Name and Address: City of San Mateo, Planning Division
330 W. 20th Avenue, San Mateo, CA 94403

3. Contact Person and Phone Number: Lily Lim, Senior Planner
llim@cityofsanmateo.org
(650) 522-7217

4. Project Location and APN: 1, 2, & 3 Waters Park Drive, San Mateo, CA 94403
035-401-440 and
035-401-450

5. Project Sponsor's Name & Address: Niki Krukowski, Manager
Strada Investment Group
101 Mission Street, Suite 420
San Francisco, CA 94105
(805) 358-9031
nkrukowski@stradasf.com

6. General Plan Designation: Executive Office

7. Zoning: E1- Executive Park

8. Description of Project:

Waters Technology Office Park is an 11.1-acre property off Norfolk St. currently occupied by an approximately 164,709 -square-foot office business park. The The project proposes to demolish the existing office park and 609 parking spaces and redevelop the site with 190 for-sale residences (434,419 square feet), including a mix of 28 two-story detached single-family residences, as well as 162 three- and four-story attached townhomes and flats. The detached

single-family residences would be arranged along the southern and eastern property boundaries, adjacent to existing residential homes, with a 15 foot setback from the property line. The denser three- to four-story townhomes and flats would be oriented toward the interior of the site, which would also include a new central community park and play area, communal garden, creek walk, and dog park. Consistent with affordable housing requirements in the City of San Mateo, the project would provide ten percent affordable units onsite. Under State Density Bonus Law, the affordable units would qualify the project for a 20 percent density bonus and one incentive/concession. In addition, State Density Bonus Law provides parking standards for density bonus projects. The maximum height of the buildings would be approximately 45 feet.

The project provides a total of 425 on-site parking spaces, which includes 45 guest spaces in parking lot and 380 resident parking spaces in parking garages. The project would provide 285 bicycle parking spaces – 261 for residents and 24 for visitors. The project will maintain its two existing access points– one main access driveway off Norfolk Street (Waters Park Drive) and one driveway over Borel Creek (emergency vehicle access only).

A Site Development Planning Application (SDPA) is required for grading and removal of major vegetation, trees 6 inches or greater in diameter. The tree planting scheme proposes 233 trees to be removed, of which 65 heritage trees are proposed for removal, and 287 new trees to be planted. Trees would line the walkways, surface parking, and perimeter of the site. An area for storm water treatment is located at the surface parking lot near Franklin Parkway.

FINDING

The Chief of Planning finds the project described above will not have a significant effect on the environment in that the attached Initial Study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this draft Mitigated Negative Declaration (MND), has made or agrees to make project revisions that clearly mitigate the effects to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

A. AESTHETICS - The project will not have a significant impact on this resource, therefore no mitigation is required.

B. AGRICULTURE AND FOREST RESOURCES -The project will not have a significant impact on this resource, therefore no mitigation is required.

C. AIR QUALITY

Impact AQ-1: Construction of the proposed project would temporarily result in cancer risk exposure at the MEI at levels above the BAAQMD significance threshold based on combined exhaust and fugitive dust emissions.

MM AQ-1.1: Prior to the issuance of demolition permits, the project applicant shall submit an Emissions Reduction Plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average of at least 79 percent reduction in DPM exhaust emissions or greater. The plan shall be submitted to the Community Development Director prior to issuance of a demolition permit and shall include the following:

Mobile diesel-powered off-road equipment included in the list below shall, at a minimum, be equipped with CARB-certified Level 3 Diesel Particulate Filters:

- All Excavators and Tractors/Loaders/Backhoes in Site Preparation Phase
- All Graders and Rollers in Grading phase
- All Rubber Tired Dozers and Rollers (Paving phase)
- All equipment in the Building Construction phase (graders, off-highway trucks, rough terrain forklifts, skid steer loaders, tractor/loaders/backhoes)
- All Off-highway trucks (Site Preparation, Grading, and Building Construction phases)

MM AQ-1.2: Alternatively, in lieu of use of Diesel Particulate Filters identified in MM AQ-1.1, the construction contractor may use other measures to minimize construction period DPM emissions to reduce the estimated cancer risk and $PM_{2.5}$ exposure below BAAQMD thresholds. For example, use of Tier 4 equipment or alternatively-fueled equipment (i.e., non-diesel or electric), added exhaust devices, or a combination of these measures could meet this requirement. Any alternative measures shall reduce DPM emissions to the same level or greater than MM AQ-1.1. If any of these alternative measures are proposed, the project applicant shall include them in the Emissions Reduction Plan, which shall include specifications of the equipment to be used during construction.

The Emissions Reduction Plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying the equipment included in the plan meets the standards set forth in this mitigation measure.

D. BIOLOGICAL RESOURCES

Impact BIO-1: Construction of the proposed project could result in impacts to nesting birds on or adjacent to the site, if present. Disturbance of raptor or other migratory bird nests present in any on-site or adjacent trees during construction activities could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW.

MM BIO-1.1: Construction activities (or at least the commencement of such activities) should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside of the nesting season, all impacts on nesting birds protected under the MBTA and CDFW will be avoided. The nesting season for most birds in San Mateo County extends from February 1st through August 30th).

MM BIO-1.2: If it is not possible to schedule construction activities between September 1 and January 31 then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. These surveys shall be conducted no more than 14 days prior to the initiation of construction. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests)

MM BIO-1.3: If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that nests of species protected by the MBTA and CDFW shall not be disturbed during project implementation.

MM BIO-1.4: If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1st).

E. CULTURAL RESOURCES - The project will not have a significant impact on this resource, therefore no mitigation is required.

F. GEOLOGY AND SOILS - The project will not have a significant impact on this resource, therefore no mitigation is required.

G. GREENHOUSE GAS EMISSIONS - The project will not have a significant impact on this resource, therefore no mitigation is required.

H. HAZARDS AND HAZARDOUS MATERIALS

Impact HAZ-1: The project could result in construction workers, future residents and occupants of the site, and nearby receptors being exposed to substantial risks and hazards related to soil and groundwater contamination at the site.

MM HAZ-1: According to the Phase II Environmental Site Assessment (ESA; Langan, 2018) for the project, lead impacted debris located in the northeastern portion of the site must be properly managed to minimize potential risk. San Mateo County Groundwater Protection Program (GPP) will serve as lead oversight agency overseeing actions related to management of soil with elevated lead. The project would implement one of two possible scenarios to mitigate human contact with lead impacted soil prior to or concurrent with redevelopment:

- remove lead impacted soil from beneath the northeastern parcels planned for single-family homes and manage remaining impacted soil beneath future multi-unit buildings under a deed restriction and under an associated, GPP-approved Operation and Maintenance Plan (OMP), or
- remove all lead impacted soil to obtain unrestricted use approval with no deed restriction needed. A hardscape (i.e., asphalt pavement) or softscape

(i.e., soil cover and permeable pavers from landscaping) cover will be required to remain above any lead-impacted soil remaining in place.

An Excavation Plan, or equivalent document, will be required under Scenarios one and two, to describe procedures for proper management and disposition of lead-impacted soil proposed for removal. Additionally, a Soil Management Plan, or equivalent document, will be required under Scenario one to ensure that engineering controls (i.e., hardscape and softscape) are maintained and that disturbance of lead-impacted soil left-in-place will result in proper handling and disposal of waste.

I. HYDROLOGY AND WATER QUALITY

Impact HYD-1: Extended dewatering of utility trench excavations may cause settlement of newly installed pipelines and adjacent improvements.

MM HYD-1: Utility trenches shall be installed with low permeability cutoffs to reduce the risk of inadvertent groundwater flow along permeable bedding or backfill. Placement of the low permeability cutoffs will be determined when utility plans are finalized.

J. LAND USE AND PLANNING -The project will not have a significant impact on this resource, therefore no mitigation is required.

K. MINERAL RESOURCES - The project will not have a significant impact on this resource, therefore no mitigation is required.

L. NOISE AND VIBRATION

Impact NOI-1: The noise generated by construction equipment could exceed the City's exterior noise level standards at adjacent property lines.

MM NOI-1.1: To reduce noise levels at the east and south residential property lines, temporary sound barriers shall be constructed. To be effective, the barriers need to have a minimum height of eight feet, a minimum surface density of three psf, and be continuous from grade to top. The barriers are not required along the entire length of the east and south property lines for the entire duration of construction. They must be located at times and locations where construction is occurring within 30 feet of these property planes.

Pneumatic nailers shall not be used during construction on the roofs of the two story single-family homes within 30 feet of the residential property planes, as the eight-foot barriers would be ineffective with the noise source at this height.

MM NOI-1.2: The City has Conditions of Approval that limit hours of construction hours from 7:00 a.m. to 7:00 p.m. on Monday through Friday, between 9:00 a.m. and 5:00 p.m. on Saturday, and between 12:00 noon and 4:00 p.m. on Sundays and holidays. The noise report found that the impact would be significant and therefore proposed the additional standard measures to minimize annoyance to neighboring properties:

- Use scrapers in lieu of loaders and hauling trucks as feasible for earth removal.
- Use a motor grader rather than a bulldozer for final grading.
- Locate noisy stationary equipment (e.g., generators and compressors) and material unloading and staging areas near the center of the project, away from residential property lines
- Locate staging and equipment loading areas away from residences. Where feasible, barriers should be used to break line-of-sight with nearby residences.
- Minimize drop height when loading excavated materials onto trucks.
- Minimize drop height when unloading or moving materials on site.
- Require that all construction equipment be in good working order and that mufflers are inspected to be functioning properly. Avoid unnecessary idling of equipment and engines.
- Use "quiet" gasoline or electric-powered compressors.
- Use electric forklifts when feasible.
- Use electric nailers instead of pneumatic nailers or manual hammers as feasible – especially on the roofs of the two-story single-family homes.
- Power saws should be shielded or enclosed where practical.
- Only use back-up beepers when required by law. Spotters or flaggers should be used in lieu of back-up beepers to direct backing operations when allowable.
- Notify the City and neighbors in advance of the schedule for each major phase of construction and expected loud activities.
- Require posted signs at the construction site that include permitted construction times, a contact for the job site, and a contact number for the City in the event of problems.
- Designate a construction noise coordinator. This coordinator would be available to respond to complaints from neighbors and take appropriate measures to reduce noise.

M. POPULATION AND HOUSING -The project will not have a significant impact on this resource, therefore no mitigation is required.

N. PUBLIC SERVICES AND RECREATION - The project will not have a significant impact on this resource, therefore no mitigation is required.

O. TRANSPORTATION/TRAFFIC - The project will not have a significant impact on this resource, therefore no mitigation is required.

P. UTILITIES AND SERVICE SYSTEMS -The project will not have a significant impact on this resource, therefore no mitigation is required.

Q. MANDATORY FINDINGS OF SIGNIFICANCE

With implementation of the mitigation measures identified above, and the conditions of approval identified in the Initial Study, the project would not degrade the quality of the environment, substantially affect biological resources, or eliminate important examples of California history or prehistory. The mitigation measures and standard measures would also ensure that the project's contribution to cumulative impacts would not be cumulatively considerable, and the project would not cause substantial adverse effects on human beings, either directly or indirectly.

PUBLIC REVIEW PERIOD

Before 5:00 p.m. on **Tuesday, December 18**, **2018** any person may:

1. Review the Draft MND as an informational document only; or
2. Submit written comments regarding the information and analysis in the Draft MND. Before the MND is adopted, Planning staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Lily Lim, Senior Planner — Date

Ronald Munekawa, Chief of Planning — Date

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
BAAQMD	Bay Area Air Quality Management District
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
C/CAG	City/County Association of Governments of San Mateo County
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CH_4	Methane
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CRHP	California Register of Historic Places
dBA	decibel
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
IS	Initial Study
GHG	Greenhouse Gas
GPA	General Plan Amendment
HI	Hazard Index
gpd	gallons per day
LBP	Lead-Based Paint
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MTC	Metropolitan Transportation Commission
N_2O	Nitrous oxide

NAHC	Native American Heritage Commission
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOD	Notice of Determination
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination Program
NRHP	National Register of Historic Places
PM	Particulate Matter
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SMCWPP	San Mateo Countywide Water Pollution Prevention Program
SMFD	San Mateo Fire Department
SMPD	San Mateo Police Department
SMUHSD	San Mateo Union High School District
SPAR	Site Planning and Architectural Review
SR	State Route
STC	Sound Transmission Class
SWPPP	Stormwater Pollution Prevention Plan
TAC	Toxic Air Contaminant
TDM	Transportation Demand Management
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of San Mateo as the Lead Agency, has prepared this Initial Study for the Waters Office Park Residential project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of San Mateo, California.

The project proposes to construct a new residential project on the approximately 11.1-acre Waters Technology Office Park site. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Lily Lim, Senior Planner
330 W. 20th Avenue
San Mateo, CA 94403
llim@cityofsanmateo.org

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of San Mateo will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of San Mateo will file a Notice of Determination (NOD), which will be available for public inspection at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Waters Office Park Residential Project

2.2 LEAD AGENCY CONTACT

Lily Lim, Senior Planner
City of San Mateo – Planning Division
330 W. 20th Avenue
San Mateo, CA 94403
650.522.7217
llim@cityofsanmateo.org

2.3 PROJECT APPLICANT

Strada Investment Group
101 Mission Street, Suite 420
San Francisco, CA 94105

2.4 PROJECT LOCATION

The project site is located at 1, 2, & 3 Waters Park Drive in the City and County of San Mateo, California. The site is located on a developed property southwest of the intersection of Waters Park Drive and South Norfolk Street. The location of the project site is shown on the following figures:

Figure 2.4-1 Regional Map
Figure 2.4-2 Vicinity Map
Figure 2.4-3 Aerial Map

2.5 ASSESSOR'S PARCEL NUMBER

035-401-440 and 035-401-450.

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

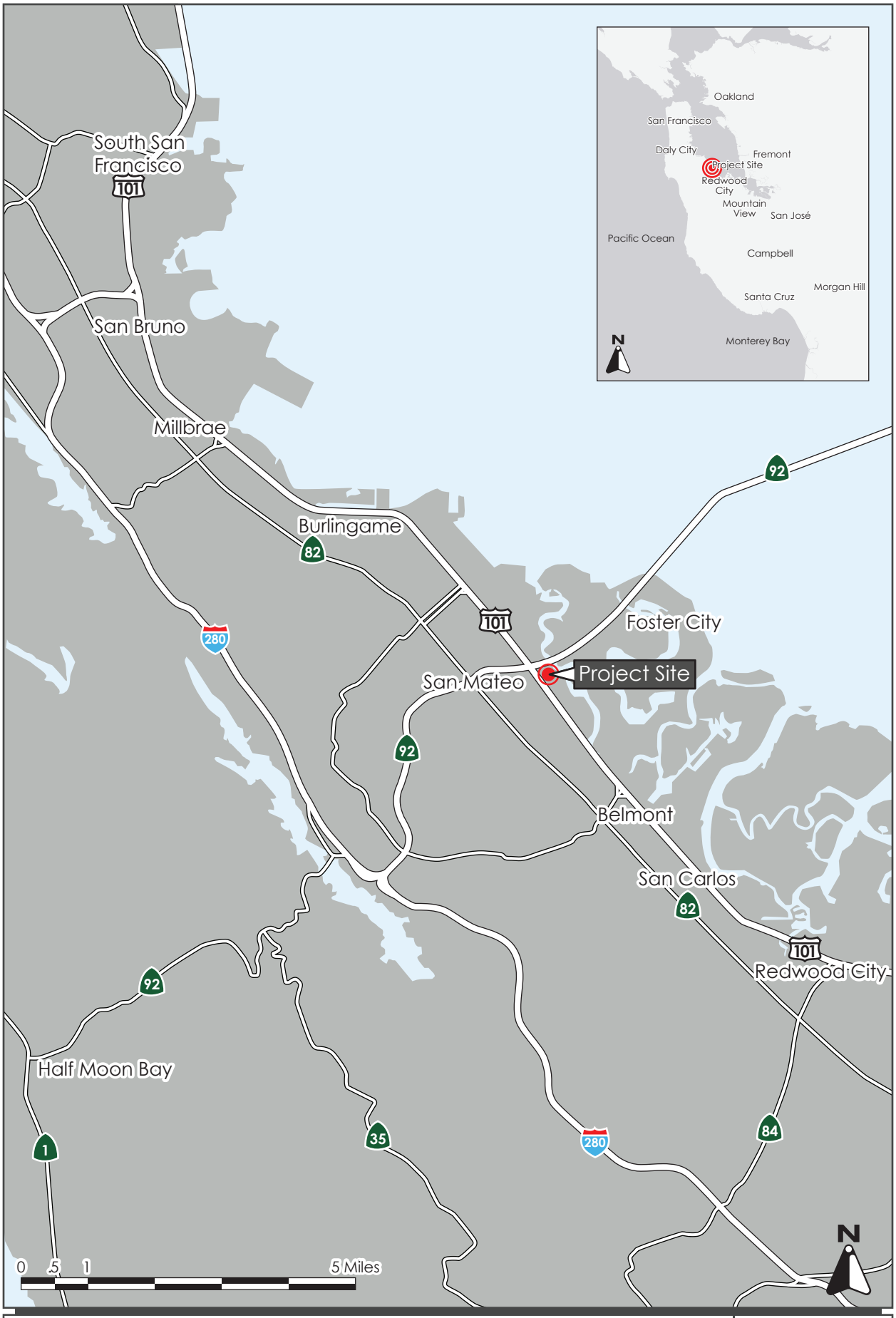
General Plan Land Use Designation: *Executive Office*
Zoning: *E1- Executive Park*

2.7 HABITAT PLAN DESIGNATION

There is no applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP), or other approved local, regional, or state habitat conservation plan for the City of San Mateo.

2.8 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

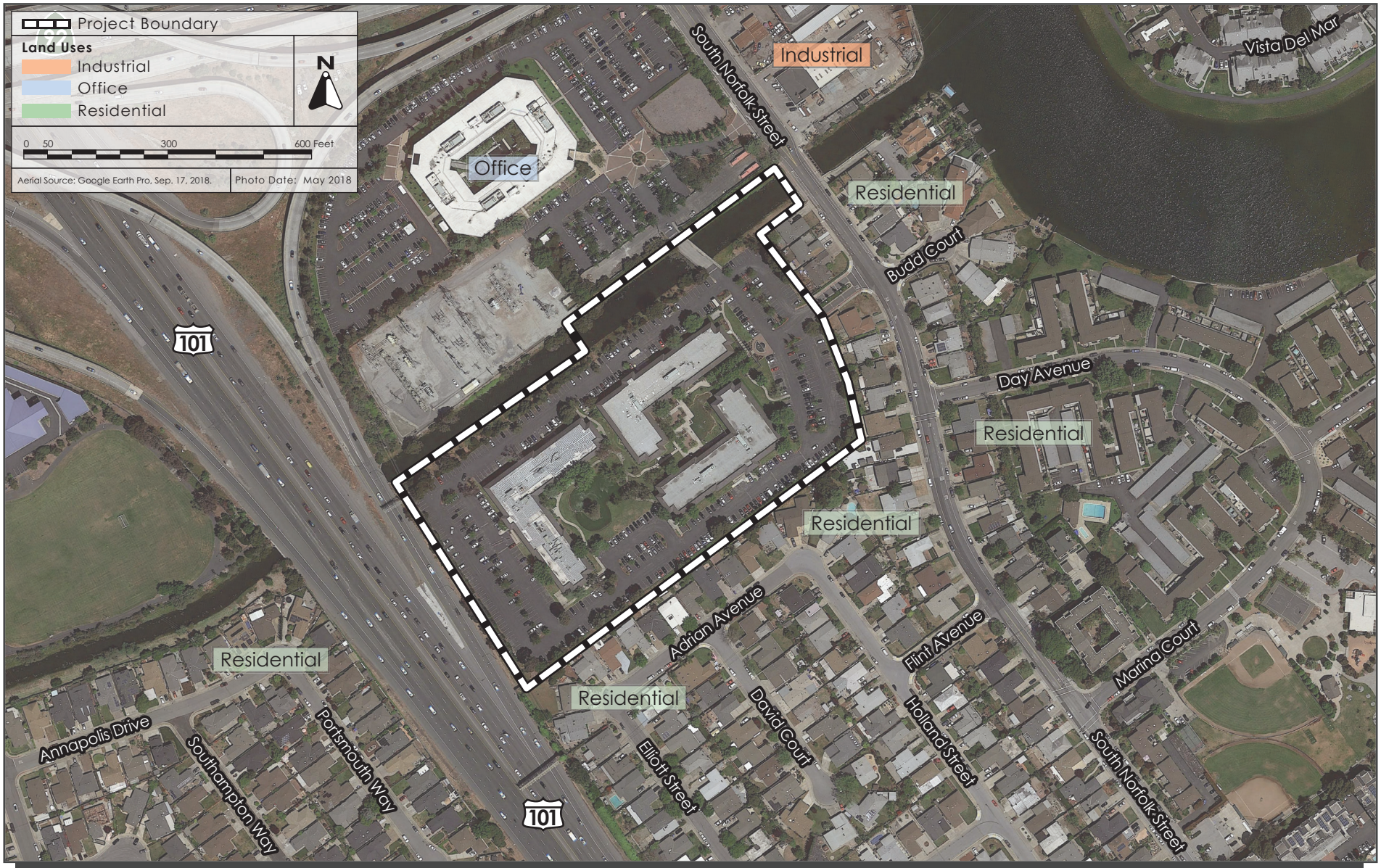
- General Plan Amendment/Zoning Reclassification
- Site Plan and Architectural Review
- Planned Development Special Use Permit
- Vesting Tentative Subdivision Map
- Site Development Planning Application



REGIONAL MAP | FIGURE 2.4-1

VICINITY MAP

FIGURE 2.4-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.4-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The project site is located southwest of the intersection of Waters Park Drive and South Norfolk Street, at 1, 2, & 3 Waters Park Drive in the City and County of San Mateo, California. The Project site is currently improved with 164,709 square feet of office space and 609 parking stalls. The existing business park consists of three 2-story buildings with perimeter parking, as shown on Figure 2.4-3. The site is bounded on the east by single-family homes along South Norfolk Street, on the north by a business park across Borel Creek, on the south by single-family homes along Adrian Avenue, and on the west by Highway 101. The site is surrounded by primarily residential and commercial land uses. A PG&É Electrical substation is also located northwest of the site, across Borel Creek. Figures 2.4-1 and 2.4-2 contain regional and vicinity maps of the project site, respectively, and Figure 2.4-3 shows an aerial photograph with surrounding land uses.

The site is designated as *Executive Office (E1)* under the City's General Plan and is zoned *Executive Park (E1)*. To allow residential uses on the site, the Project proposes a General Plan Amendment (GPA) from the site's existing designation of *Executive Office*, to *Medium Density Multi-Family*; as well as a Zoning Reclassification from *Executive Park (E1)* to *Multiple Family Dwellings, Medium Density (R-3).*

3.2 PROPOSED DEVELOPMENT

3.2.1 Site design

The project proposes to demolish the existing 164,709 square foot office park and 609 parking spaces and redevelop the site with 190 for-sale residences (434,419 square feet), including a mix of 28 two-story detached single-family residences, as well as 162 three- and four-story attached townhomes and flats. The detached single-family residences would be arranged along the southern and eastern property boundaries, adjacent to existing residential homes, with a 15 foot setback from the property line. The denser three- to four-story townhomes and flats would be oriented toward the interior of the site, which would also include a new central community park and play area, communal garden, creek walk, and dog park. Consistent with affordable housing requirements in the City of San Mateo, the project would provide ten percent affordable units onsite. Under State Density Bonus Law, the affordable units would qualify the project for a 20 percent density bonus and one incentive/concession. In addition, State Density Bonus Law provides parking standards for density bonus projects. The maximum height of the buildings would be approximately 45 feet. Figures 3.2-1 to 3.2-5 show the site plans and building elevations.

3.2.2 Tree Removal and Landscaping

Construction of the proposed project would remove all the existing 233 trees (65 "Heritage Trees" and 168 others) and would replace them with landscaping including 287 trees, shrubs, turf, and bioretention areas around and throughout the project site (refer to Figure 3.2-6 Landscaping Plan).

CONCEPTUAL SITE PLAN | FIGURE 3.2-1

2-STORY DETACHED HOUSE BUILDING ELEVATION | FIGURE 3.2-2

3-STORY BLOCK HOME BUILDING ELEVATION | FIGURE 3.2-3

3-STORY TOWNHOME BUILDING ELEVATION | FIGURE 3.2-4

4-STORY ROW HOME BUILDING ELEVATION | FIGURE 3.2-5

Dog Park- Off-leash Dog Park with seating, mulch paving and salvaged log climbing features. Located at the back of the site to activate the creekside of the site.

Central Open Space- The northern portion of the open space connects the parks directly to the Creek Path and Overlook. The space features a central lawn and a sculptural art piece.

Creek Path- A pathway provides new public access to the creek along the length of the property. This stabilized crushed stone path will be surrounded by new native planting and includes seating and picnic areas along its length. Pedestrian pole lights will aid in nighttime security.

Existing Bridge- The streetscape connects to the existing bridge to provide pedestrian, cyclist and EVA access to the adjacent site.

Paseos- A series of garden walks run between the units serving as a front entry for the Townhomes and providing a series of spaces to explore. Horticulturally diverse planting will give the Paseo spaces different characters creating variety across the site.

Universal Loading Zone- This area is intended to serve as the centralized rideshare pickup for the community. The roundabout gives drivers the opportunity to exit without circling the loop road.

Entry Garden- This area is intended to serve as the centralized rideshare pickup for the community. The roundabout gives drivers the opportunity to exit without circling the loop road.

Stormwater Treatment- Depressed treatment gardens are dispersed throughout the site to capture and clean stormwater runoff from impervious areas of the site.

Screening- Multi-layered screening includes a soundwall, evergreen tree planting and a tough understory planting screens the Freeway sound and view from residents.

Central Open Space- This central park is intended to be the gathering place for the community. Featuring a children's play area with custom, sculptural feature, communal dining area with a grill and an open lawn to accommodate a variety of events and activities.

Community Garden- A series of raised beds give residents a space to grow their own food and enjoy gardening. A picnic table creates a gathering and work space.

Stormwater Treatment Planters- These concrete planters line the streets and are scattered throughout the open space. Some will be recessed to catch surface flow from the paving, while those adjacent to the buildings will be above grade and treat stormwater from the roofs. The visibility of these spaces teach residents about the passive treatment of the water within the community.

LANDSCAPE PLAN | FIGURE 3.2-6

FIGURE 3.2-7

VISUAL RENDERING OF THE SITE

3.2.3 Site Access and Parking

Per Chapter 27.64 of the San Mateo Municipal Code, the project would require 413 on-site parking spaces for residents and guests. The project provides a total of 425 on-site spaces, which includes 45 guest spaces in parking lot and 380 resident parking spaces in parking garages. The project would provide 285 bicycle parking spaces – 261 for residents and 24 for visitors. The project will maintain its two existing access points– one main access driveway off Norfolk Street (Waters Park Drive) and one driveway over Borel Creek (emergency vehicle access only).

3.2.4 General Plan and Zoning

The Land Use Designation for the site in the City's General Plan is *Executive Office*, which is intended to provide, create, preserve, and enhance areas devoted primarily to conference, research, professional, and administrative activities. The current zoning of the site is *E1 (Executive Park)*. The purpose of the *E1* District is to encourage commercial uses which support administrative, executive, and professional office uses, and various accessory uses. Residential uses within the District are only allowed on a residential overlay district classification subject to R3 district "Minimum Development Standards" in Section 27.22.040 and affordable housing requirements as adopted by City Council resolution, unless otherwise specified in Chapter 27.29; however, secondary units are prohibited.

The Project proposes a General Plan Amendment to the site's existing designation of *Executive Office*, to *Medium Density Multi-Family*; as well as a Zoning Reclassification from *Executive Park (E1)* to *Multiple Family Dwellings, Medium Density (R-3)* to allow for residential uses on the site. The *Medium-Density Multi-Family* designation allows a housing density of 18-35 units/acre or a population of 40-80 people per acre.

3.2.5 Utility Improvements

Several storm drains were observed throughout the existing parking lot areas that appear to discharge into the municipal storm drain system and that likely discharge directly into the adjacent Borel Creek. Stormwater runoff from the proposed project would be collected via six and eight-inch storm drains in the parking lots or bioretention/landscaped areas of the site, and then directed to the municipal stormwater system.

Wastewater from the project site would be directed to six-inch sanitary sewer lines and would be connected to the existing sanitary sewer line manhole in the southeast corner of the site. The project is proposing an eight-inch domestic water line and fire water line, along with 12-inch storm drain line and eight-inch sanitary sewer line.

3.2.6 Demolition and Construction

The proposed project would take approximately 18-24 months to construct, possibly starting demolition in early 2019 and construction starting in fall 2019 and occur for an additional 12 months thereafter. Construction activities associated with the proposed project include site clearing and demolition (e.g., removing existing vegetation and trees and the existing structures on the project site), utility connections (e.g., new lateral connections to the existing water, sewer, and storm drain mains), building construction, frontage improvements (e.g., new street trees, new curb, gutter,

sidewalk and driveway construction and placing existing overhead utility lines underground), and landscaping on the site. No more than one foot of cut or fill is planned for site development.

During construction, all staging activities (e.g., equipment and material storage) would occur on the project site. The construction workers would park on the project site and in the project area.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.10	Land Use and Planning
4.2	Agricultural and Forestry Resources	4.11	Mineral Resources
4.3	Air Quality	4.12	Noise and Vibration
4.4	Biological Resources	4.13	Population and Housing
4.5	Cultural Resources	4.14	Public Services
4.6	Geology and Soils	4.15	Recreation
4.7	Greenhouse Gas Emissions	4.16	Transportation/Traffic
4.8	Hazards and Hazardous Materials	4.17	Utilities and Service Systems
4.9	Hydrology and Water Quality	4.18	Mandatory Findings of Significance

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Checklist and Discussion of Impacts** – This subsection includes a checklist for determining potential impacts and discusses the project's environmental impact as it relates to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HAZ-1** denotes the first potentially significant impact discussed in the Hazards and Hazardous Materials section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM NOI-2.3** refers to the third mitigation measure for the second impact in the Noise section.
- **Conclusion** – This subsection provides a summary of the project's impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The San Mateo Vision 2030 General Plan currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this Initial Study. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an "environmental impact" as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Scenic Highways Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263.

In San Mateo County, there are three state-designated scenic highways, including California State Route 1 (SR-1) segment between south of Half Moon Bay to the Santa Cruz County line (approximately 9.5 miles west from the project site), Interstate 280 (I-280) segment near the City of San Bruno to Santa Clara County Line (approximately 3.9 miles west from the project site), and California State Route 35 segment between State Route 92 (SR-92) intersection to Santa Cruz County Line (SR35) (approximately four miles west from the project site). There are no state-designated scenic highways in the City of San Mateo.[1]

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically, vehicle miles traveled (VMT). SB 743 also includes several important changes to CEQA that apply to transit-oriented developments, including aesthetics and parking. Specifically, with regard to parking, SB 743 requires that the parking impacts of a residential, mixed-use residential, or employment center project, as defined, on an infill site, as defined, within a transit priority area, as defined, shall not be considered significant impacts on the environment. A project's aesthetic (and parking) impacts will no longer be considered significant impacts on the environment if:

1. The project is a residential, mixed-use residential, or employment center project, and
2. The project is located on an infill site within a transit priority area.[1]

[1] California Department of Transportation. *California Scenic Highway Mapping System*. Accessed: June 5, 2018. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

[1] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Office of Planning and Research. "Changes to CEQA for Transit Oriented Development – FAQ." October 14, 2014. Accessed: May 1, 2018. Available at: http://www.opr.ca.gov/ceqa/updates/sb-743/transit-oriented.html.

The exemption for aesthetic impacts does not include impacts to historic or cultural resources, however. Local governments retain their ability to regulate a project's transportation, aesthetics, and parking impacts outside of the CEQA process. Amendments to the CEQA Guidelines to address SB 743 are expected to apply statewide on January 1, 2020. The project site is a residential development located on an infill site but the project is not located within a Transit Priority Area per Metropolitan Transportation Commission (MTC) GIS map, therefore SB 743 won't apply to the project.

Local

County of San Mateo General Plan

The County of San Mateo General Plan states that Alameda de las Pulgas, Crystal Springs Road, Polhemus Road, and State Route 92 are County-designated scenic roads.[2]

City of San Mateo General Plan

The City of San Mateo General Plan does not designate any scenic roadways in the City as locally scenic. Applicable General Plan policies related to aesthetics include, but are not limited to, the following listed below.

Policies	Description
C/OS 6.4	Retain the maximum feasible number of trees and preserve the character of stands or groves of trees in the design of new or modified projects.
C/OS 10.1	Review planning applications for opportunities to promote exceptional design and use of public open spaces in new developments.
C/OS 14.10	When master planning or significantly redeveloping existing facilities, develop an image plan that includes the effective use of signage, color schemes, lighting and plant material which meets both aesthetic and maintenance needs.
UD 2.2	*Building Scale.* Ensure that new multi-family developments respect the existing scale of the neighboring buildings by providing a change in the building face at spacings common to existing buildings and by stepping down building height towards the street to more closely match the height of existing buildings.
UD 2.3	*Style and Materials.* Encourage the design of new multi-family developments in areas with a dominant building style or dominant type of exterior building materials to complement the style and incorporate the common materials of the area.
UD 2.7	*Respect Existing Scale.* Encourage new commercial development to respect the scale of surrounding buildings by providing breaks in the building face at spacings common to buildings in the area and by stepping back upper floors.
UD 2.9	*Pedestrian Oriented Design.* On retail commercial projects, designate pedestrian activity as a priority through the design and provision of adequate sidewalk widths, locating windows along ground floor street facades, trees and awnings, and human scale construction materials and features.
UD 2.16	*Design and Placement of Solar Access and Panels.* Encourage applicants to incorporate solar energy systems into their projects. Building owners can minimize non-renewable heating and cooling methods and maximize solar heat gain by using solar panels and innovative building design features such as the use of overhangs, having south-facing windows and planting trees that provide shade. Important considerations in the design and placement of solar panels include: a. Building placement and adjacencies should be considered such that they do not unreasonably affect the solar access of neighboring residential properties.

[2] San Mateo County. *General Plan*. November 1986.

Policies	Description
	b. Solar panels and other roof-mounted equipment should be integrated into building design so as to not detract from the appearance of a home and reduce obtrusiveness. c. Roof-mounted solar energy equipment and panels should be located below ridgelines and on sides of roof and away from street view wherever possible. Non-glare and non-reflective type panels should be utilized. The design and placement of roof-mounted solar panels should account for the heights of existing trees and future growth. This applies to both trees on-site and neighboring properties, including Heritage trees and street trees.

City of San Mateo Zoning Ordnance

The City's Zoning Ordinance, Title 27 in the Municipal Code, provides standards for the physical development of the City. The City's Site Plan and Architectural Review (SPAR) process applies to new building construction, projects involving historic buildings within the Downtown Specific Plan area, and duplexes. SPAR establishes the following specific findings that must be made to allow approval of new building construction:

- The structures, site plan, and landscaping are in scale and harmonious with the character of the neighborhood;
- The development will not be detrimental to the harmonious and orderly growth of the City;
- The development will not impair the desirability of investment or occupation in the vicinity, and otherwise is in the best interests of the public health, safety, or welfare;
- The development meets all applicable standards as adopted by the Planning Commission and City Council, conforms with the General Plan, and will correct any violations of the Zoning Ordinance, Building Code, or other Municipal Codes that exist on the site; and
- The development will not adversely affect matters regarding police protection, crime prevention, and security.

In November 1991, the voters adopted an initiative (Measure H), which amended the General Plan. Measure H made several changes to the General Plan, primarily directed at reducing maximum heights and densities for residential and most non-residential uses, while increasing the City's commitment to providing affordable housing. Measure H generally provided maximum heights of 55 feet and densities of 50 units per acre. Some areas within the City permit heights of up to 75 feet and densities of up to 75 units per acre, if a project provides substantial public benefits.

In November 2004, the voters adopted Measure P, which was an extension of Measure H. This extension to 2020 included updates, clarifications, and some changes to Measure H. Significant provisions of Measure H were maintained. The City's Zoning Code was amended to reflect the land use policies and text contained in the General Plan to conform to the provisions of Measure H and Measure P.

4.1.1.2 *Existing Conditions*

Project Site

The 11.1-acre project site is located southwest of the intersection of Waters Park Drive and South Norfolk Street, at 1, 2, & 3 Waters Park Drive in the City and County of San Mateo. The Project site is currently improved with three 2-story buildings with perimeter parking. The two-story office

buildings are made of 1970's wood-frame construction (as shown in photo 1). Other improvements include two artificial ponds, water fountains and mature landscaping at the center, and mature landscaping and paved surface parking on all four sides of the site (Photo 2). Ornamental trees and grasses line both the ponds. Views of the site are limited to immediate surrounding parcels and roadways, including US Route 101 (US 101).

Surrounding Land Uses

Development in the project area is a mix of office/commercial and residential land uses. The buildings vary in height from one- to three- stories and utilize a variety of building materials, including stucco, concrete, and brick. The buildings also vary in age from mid-century to recent construction.

The project site is located directly east of US 101 and south of Borel Creek. Surrounding land uses in the project vicinity include single- and multi-family residential uses to the south, east, and west (across US 101), Fiesta Meadows Park to the west (across US 101), and commercial and office uses to the north (across Borel Creek). A bridge as shown in Photo 3 connects the project site to the business park on the north. Views of the project site and surrounding areas are shown in Photos 1 to 7. A PG&É Electrical substation is also located northwest of the site, across Borel Creek (see photo 4).

4.1.1.3 *Scenic Views and Resources*

The project site is approximately five to 10 feet above sea level and is relatively flat. Views of U.S. 101, Borel Creek, and surrounding residential and commercial uses are visible from the project site (as shown in photos 3 through 7). The San Francisco Bay is not visible from the site. As discussed above, the City does not contain any officially state-designated scenic highways, or City-designated scenic roadways. Nearby County-designated scenic highways include SR 1 (approximately 9.5 miles west of the project site), I-280 (approximately 3.9 miles west of the project site), and SR 35 (approximately four miles west of the project site). None of these roadways can be seen from the project site. Nearby County-designated scenic roads include Alameda de las Pulgas (1.4 miles west of the site), Crystal Springs Road (2.1 miles northwest of the site), Polhemus Road (3.2 miles southwest of the site), and SR 92 (650 feet north of the site). J. Hart Clinton Drive (approximately 1.3 miles northeast of the site) is also a local roadway that offers views of creeks, hillsides, the Bay, and San Francisco and East Bay skylines, among other sights. The SR 92 bridge ramp can be seen

Photo 1: View of the project site from South Norfalk Street looking west.

Photo 2: View of the pond, water fountain and mature landscaping at the center of the project site.

PHOTOS	1 AND 2

Photo 3: View of Borel Creek to the north of the project site. Bridge connecting the project site to the business park across Borel Creek can also be seen.

Photo 4: View of the PG&É electrical substation located northwest from the site across Borel Creek.

PHOTOS	3 AND 4

Photo 5: View of the project site and residences on Adrian Avenue to the south of the site.

Photo 6: View of project site and adjacent residences on South Norfolk Street looking east .

PHOTOS	5 AND 6

Photo 7: View of the U.S. 101 looking west from the site.

PHOTO	7

from the project site. Alameda de las Pulgas, Crystal Springs Road, Polhemus Road, and J. Hart Clinton Drive are not visible from the site.

4.1.1.4 *Light and Glare*

Sources of light and glare are abundant in the urban environment of the project area, including, but not limited to, street lights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

4.1.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐	1,2,3
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	1,2,3,4,5
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1,2,3,4,5
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1,2,3

4.1.2.1 *Scenic Vista (Checklist Question a)*

As discussed above, the project site is surrounded by urban development, and views from the site are limited to U.S. 101, Borel Creek, and the surrounding residential and commercial development. The San Francisco Bay is not visible from the project site. The site is currently developed with three two-story office buildings and associated parking and landscaping. The proposed two- to four- story residential complex would not directly obstruct views of any scenic vista from the adjacent residences. Due to the density of development in the surrounding area, proposed orientation of the project development, and low elevation of the site, the proposed project would not obstruct views of a scenic vista. **(Less Than Significant Impact)**

4.1.2.2 *Scenic Highways (Checklist Question b)*

As discussed above, the City does not contain any State designated scenic highways, however, the project site is in proximity to SR 92, which is a county-designated scenic road. SR 92 is separated from the project site by the PG&E electrical substation and existing commercial development on the north. The project site is partially visible from SR 92. The proposed residential buildings would be two-to four-stories (maximum height of 45 feet) tall, and would not be a significant change to the mass and scale compared to existing two-story office development. Moreover, SR 92 is not an officially designated scenic highway. Therefore, the impact would be less than significant

The project site does, however, contain mature trees (refer to Section *4.4 Biological Resources* for a detailed discussion about the trees onsite). The proposed project would remove 233 trees for the construction of the proposed project. The proposed project includes planting of 245 new trees as part of project's landscaping, which would replace removed trees at a minimum of 1:1 ratio, and reduce the loss of existing trees to a less than significant level. The project site does not contain rock outcroppings or historic buildings onsite. For these reasons, the proposed project would not impact scenic resources onsite and in the project area. **(Less Than Significant Impact)**

4.1.2.3 *Visual Character and Quality (Checklist Question c)*

The project site is surrounded by commercial and single- and multi-family residential development. The project proposes to demolish the existing office buildings and redevelop the site with 190 residences, including two-story detached single-family residences and three- and four-story attached townhomes and flats, which would contribute to and enhance the existing residential community that surrounds the project site (See Figure 3.2-7). The detached single-family residences would be arranged along the southern and eastern property boundaries, with a 15-foot setback from the property line, in order to respect the single-family homes that immediately neighbor the site. The denser three- to four-story townhomes and flats would be oriented toward the interior of the site, which would also include a new central community park and play area, communal garden, and creek trail that would connect Norfolk Street to a new enclosed dog park. More dense units – 'Townhomes', 'Stacked Flats', and 'Row Homes' – are oriented toward US 101 to the western project boundary and Borel Creek at the northern project boundary. The maximum height of the proposed building is 45 feet, which meets the City's zoning restriction on height of 55 feet established by Measure H. The 'Single Family Detached Homes' are intended to soften the edges of the project development and provide an appropriate step down to the neighboring residences.

The proposed community play structures would be designed in a way to enhance the aesthetic appeal of spaces for children. In addition, construction of a new creek trail would activate a currently inaccessible, underutilized 1,000 feet stretch of the creek into a trail lined with new hardscape, seating, and native plants that would culminate at a new dog park. The trail would connect directly to Norfolk Street and provides immediate access to the other centrally located amenities including the play space, lawn open space, communal grills, dining tables and garden. The townhome-style condominiums are similar in style, size, and density to other existing townhome communities in San Mateo, notably Bay Meadows. Additionally, the proposed project would be designed for consistency with City's design guidelines and would be subject to the City's SPAR process to ensure consistency in design with the surrounding character. For these reasons, the proposed project would not adversely impact existing the visual character or of the site and its surroundings. **(Less Than Significant Impact)**

4.1.2.4 *Lighting and Glare (Checklist Question d)*

The project site is located in an urbanized area with existing sources of light and glare, including streetlights on nearby residential streets, security lighting at the single- and multi-family residential developments to the south and east, and office building parking lot lighting to the north. Interior lighting from surrounding residences, and headlights from vehicles on surrounding streets and US 101 also contribute to existing light and glare conditions.

The proposed residential development would include security lighting. During the SPAR process, exterior building materials would be reviewed to ensure compatibility with existing buildings and City standards associated with light and glare. The SPAR process would ensure that the proposed building materials do not include highly reflective materials, such as mirrored glass. In addition, the proposed development would be lined with new trees and screening shrubs to shield views and light sources.

For these reasons, the proposed project would not create significant source of substantial light or glare that would adversely affect day or nighttime views of the project area. **(Less Than Significant Impact)**

4.1.3 Conclusion

Due to the review of the project under the City's SPAR process, the proposed project would not result in significant aesthetics impacts. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Existing Conditions*

The proposed project site is located in an urbanized area in the City of San Mateo and is surrounded by development. The project site has an *Executive Office* General Plan designation and is zoned *E1-Executive Park*. It is not under a Williamson Act contract, and there are no existing agricultural or forestry resources on or in the vicinity of the site.[3]

4.2.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	1,2,7
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1,2,6
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	1,2,3,4
d) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2,3,4
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2,3,4,6, 7

4.2.2.1 *Impacts to Agricultural and Forestry Resources (Checklist Question a through e)*

The project site is not zoned for agricultural uses and is designated as *Urban and Built-Up Land* in the *San Mateo County Important Farmland 2014* map. The project area does not contain designated *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance*, therefore, the project

[3] California Department of Conservation, Division of Land Resource Protection. *San Mateo County Williamson Act FY 2006/2007.* 2012.

would not directly or indirectly convert such lands to non-agricultural use.[4] The project site is not zoned or used as forest land or timberland. For these reasons, the proposed project would not conflict with any existing agricultural or forest land zoning or uses. **(No Impact)**

4.2.3 Conclusion

The proposed project is located within a densely urbanized area that is designated for urban land uses and would not result in impacts to any agricultural or forestry resources. **(No Impact)**

[4] California Department of Conservation, Division of Land Resource Protection. *San Mateo County Important Farmland 2016*. February 2018.

4.3 AIR QUALITY

The following discussion is based, in part, upon a Health Risk Assessment and Supplemental Air Quality Analysis prepared by *Ramboll US Corporation* in May 2018 and August 2018, respectively. These reports are provided as Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Regulatory Framework*

Federal and State

Air Quality Overview

Federal, state, and regional agencies regulate air quality in the San Francisco Bay Area Air Basin, within which the proposed project is located. At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The California Air Resources Board (CARB) is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act.

Regional and Local Criteria Pollutants

The federal Clean Air Act requires the EPA to set national ambient air quality standards for six common air pollutants (referred to as "criteria pollutants"), including particulate matter (PM), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate.

Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. "Attainment" status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB. The Bay Area as a whole does not meet state or federal ambient air quality standards for ground level ozone and fine particulate matter ($PM_{2.5}$), nor does it meet state standards for respirable particulate matter (PM_{10}). The Bay Area is considered in attainment or unclassified for all other pollutants.

Toxic Air Contaminants and Fine Particulate Matter

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality, usually because they cause cancer. TACs are found in ambient air, especially in urban areas, and are released by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. CARB has adopted regulations for stationary and mobile sources to reduce emissions of diesel exhaust and diesel particulate matter (DPM). Several of these regulatory programs affect medium and heavy-duty diesel trucks, which represent the bulk of DPM emissions from California

highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[5]

Fine Particulate Matter ($PM_{2.5}$) is a complex mixture of substances that includes elements such as carbon and metals, compounds such as nitrates, organics, and sulfates, and mixtures such as diesel exhaust and wood smoke. Because of their small size (particles are less than 2.5 micrometers in diameter), $PM_{2.5}$ can lodge deeply into the lungs. According to the Bay Area Air Quality Management District (BAAQMD), $PM_{2.5}$ is the air pollutant most harmful to the health of Bay Area residents.

Common stationary sources of TACs and $PM_{2.5}$ include gasoline stations, dry cleaners, and diesel backup generators. The other more significant, common mobile source is motor vehicles on roadways and freeways. Unlike regional criteria pollutants, local risks associated with TACs and $PM_{2.5}$ are evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Regional

2017 Clean Air Plan

BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the *Bay Area 2017 Clean Air Plan* (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD would continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of Sam Mateo and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality Impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

[5] CARB. "Overview: Diesel Exhaust and Health." Accessed :April 16, 2018. Available at: https://www.arb.ca.gov/research/diesel/diesel-health.htm.

Local

City of San Mateo General Plan

Policies	Description
LU 8.9	The City shall mitigate air quality impacts generated during construction activities by the following measures: • Use of appropriate dust control measures, based on project size and latest BAAQMD guidance, shall be applied to all construction activities within San Mateo. • Utilization of construction emission control measures recommended by BAAQMD as appropriate for the specifics of the project (e.g., length of time construction and distance from sensitive receptors). This may include the utilization of low emission construction equipment, restrictions on the length of time of use of certain heavy-duty construction equipment, and utilization of methods to reduce emissions from construction equipment (alternative fuels, particulate matter traps and diesel particulate filters).
LU 8.11	The City shall require that when new development that would be a source of TAC's is proposed near residences or sensitive receptors, either adequate buffer distances shall be provided (based on recommendations and requirements of CARB and BAAQMD), or filters or other equipment/solutions shall be provided to reduce the potential exposure to acceptable levels. When new residential or other sensitive receptors are proposed near existing sources of TAC's, either adequate buffer distances shall be provided (based on recommendations and requirements of the California Air Resources Control Board and BAAQMD), or filters or other equipment/solutions shall be provided to the source to reduce the potential exposure to acceptable levels.

4.3.1.2 *Existing Conditions*

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of a pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution. These factors give the Bay Area relatively high atmospheric potential for pollution.

Sensitive Receptors

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, child-care centers, retirement homes, convalescent homes, hospitals, and medical clinics. Sensitive receptors in the project area include residential uses to the south and east of the site. Future project residents will also be sensitive receptors.

In the Land Use Element of its 2030 General Plan (General Plan Policy LU 8.11), the City of San Mateo requires a site-specific air quality analysis to evaluate health risks to residents when new residential receptors are proposed near existing sources of toxic air contaminants (TACs). The site-specific analysis required by the City includes a Health Risk Assessment and establishes buffer distances, filters, and other solutions to reduce potential exposures to acceptable levels outlined by the BAAQMD.

Existing Site

The proposed project is located approximately 730 feet to the south of Highway 92, 80 feet to the east of Highway 101, 2,200 feet to the north of E. Hillsdale Boulevard, and 520 feet to the west of the Seal Slough (aka Marina Lagoon) (a waterway that channels through San Mateo and Foster City). The Project site is currently occupied with 164,709 square feet of office space and over 609 parking stalls. The existing business park consists of three 2-story buildings with perimeter parking and landscaping.

4.3.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,2,3,8,9
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,2,3,8,9, 10
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,2,3,8,9, 10
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	1,2,3,9, 10,11
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1,2,3

4.3.2.1 *Consistency with the Clean Air Plan (Checklist Question a)*

Determining consistency with the 2017 CAP involves assessing whether applicable control measures contained in the 2017 CAP are implemented. Implementation of control measures improve air quality and protect public health. The control measures describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources and is based on the following four key priorities:

- Reduce emissions of criteria air pollutants and TACs from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
- Decarbonize our energy system.

Although the project proposes new housing not accounted for in the San Mateo General Plan, and therefore will result in population growth not assumed in the 2017 CAP, the project supports the primary goals of the CAP in that it would not exceed the BAAQMD thresholds for operational and

construction air pollutant emissions (refer to *Sections 4.3.3.3* and 4.3.3.4 below), nor greenhouse gas emissions (refer to Section 3.8). In addition, the project site is located in an urban area served by existing multi-modal transportation facilities. The project will include transportation and energy control measures and would be generally consistent with the CAP's control measures. The project would not hinder the implementation of the CAP control measures and would not conflict with or obstruct implementation of the 2017 CAP, particularly when taking into account existing baseline emissions from the current office use. The project, therefore, would not result in a significant impact related to inconsistency with the 2017 CAP. **(Less than Significant Impact)**

4.3.2.2 *Operational Impacts to Regional and Local Air Quality (Checklist Question b, c)*

According to the BAAQMD thresholds, a project that generates more than 54 pounds per day of ROG (reactive organic gases), NO_x, or $PM_{2.5}$; or 82 pounds per day of PM_{10} would be considered to have a significant impact on regional air quality. The BAAQMD developed screening criteria that provide lead agencies with a conservative indication of whether a proposed project could result in a significant operational impact (e.g., daily or annual emissions above these thresholds). The proposed project would construct 28 single-family units and 162 townhome-like residential units. With 190 dwellings proposed, the project is below the screening size for both condos/townhouses (451 dwelling units) and single-family homes (325 dwelling units).[6] Based on the BAAQMD screening tables, the project would not result in a significant impact to regional air quality in the San Francisco Bay Area Air Basin due to operational criteria pollutant emissions.

According to the BAAQMD's screening criteria for localized CO, impacts are considered less than significant if:

1. The project is consistent with an applicable congestion management program established by the county's congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Peak hourly traffic volumes for roadways within 1,000 feet of the project site were provided by Hexagon Transportation Consultants, Inc. and are shown in Appendix H. The traffic volumes on these roads are much less than 24,000 vehicles per hour and the project would generate approximately half as many total peak hour trips when compared to the existing uses. Thus, the project would not increase traffic volumes at any intersection to over 44,000 or 24,000 vehicles per hour. The project, therefore, would not result in significant impacts related to CO. **(Less than Significant Impact)**

[6] Bay Area Air Quality Management District. *CEQA Air Quality Guidelines*. Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes. May 2017. p. 3-2.

4.3.2.3 *Construction and Demolition Impacts (Checklist Question b, c, d)*

Criteria Pollutant Emissions

Construction activity is anticipated to include grading and site preparation, trenching, building construction, and paving. Construction-related automobiles, trucks, and heavy equipment are a primary concern with regard to criteria pollutant emissions as a result of diesel particulate matter. Emissions of reactive organic gases (ROG), NO_X, and PM_{10} and $PM_{2.5}$ exhaust associated with construction are shown in Table 4.3-1. The daily average mitigated NOx emissions from the proposed project are 36 pounds per day (lbs/day), ROG emissions are 22 lbs/day, PM10 emissions are 0.28 lbs/day and PM2.5 emissions are 0.26 lbs/day. These values are below the applicable BAAQMD significant thresholds. The project, therefore, would not result in significant impacts related to criteria pollutants. **(Less than Significant Impact)**

Table 4.3-1: Construction Criteria Pollutant Emissions

Scenario	ROG (tons)	NOx (tons)	PM_{10} Exhaust (tons)	$PM_{2.5}$ Exhaust (tons)
Offroad Emissions	0.33	3.8	0.16	0.15
Onroad emissions	0.13	1.9	0.010	0.010
Area Source Emissions	3.1	--	--	--
Total Construction Emissions	3.5	5.7	0.174	0.161
Construction Days	314			
Average daily emissions	**22 lbs./day**	**36 lbs./day**	**1.1 lbs./day**	**1 lbs./day**
BAAQMD Thresholds	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	**No**	**No**	**No**	**No**

Construction Dust

During demolition, grading, and construction activities, dust would be generated. Most of the dust would result during grading activities. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed at any given time, amount of activity, soil conditions and meteorological conditions. Typical winds during late spring through summer are from the northwest. Nearby land uses could be adversely affected by dust generated during construction activities. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are employed to reduce these emissions. The standard dust control measures listed below would be implemented by the proposed project, resulting in a less than significant impact related to construction dust. **(Less than Significant Impact)**

Conditions of Approval

Implementation of the following measures, recommended by BAAQMD, as standard conditions of approval would reduce the air quality and fugitive dust-related impacts associated with grading and new construction to a less than significant level.

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 roadways, driveways, and sidewalks to be paved shall be completed as soon as possible and feasible. Building pads shall be laid as soon as possible and feasible, as well, 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 California Code of Regulations [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. Post a publicly visible sign 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. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Construction Toxic Air Contaminants

An assessment of construction emissions was completed to determine whether off-site sensitive receptors would be exposed to TAC emissions that exceed cancer risk, acute hazard index, chronic hazard index, and $PM_{2.5}$ thresholds at the maximally exposed individual (MEI). First, emissions were estimated, and then the off-site air concentrations that would result from the emissions were calculated. Then, the risks associated with those concentrations at off-site receptors were calculated.

Sensitive off-site receptors in the vicinity of the project include residential uses to the south and east. Based on orientation with respect to the predominant wind direction and other factors, modeling was completed for the MEI in the project vicinity. The assessment utilized the default CalEEMod off-road construction equipment tiers. The child receptor, which would result in the highest estimated offsite impacts, was evaluated in the assessment.

Based on the anticipated construction activities associated with the proposed project, the estimated excess lifetime cancer risks for the MEI would be 43 in one million, which is above the single source threshold of 10 in one million. The $PM_{2.5}$ concentration would 0.25 µg/m3, which is below the single source threshold of 0.3 µg/m3. The chronic HI would be 0.052, which is below the single source significance thresholds of 1.0. All impacts are below the BAAQMD significant thresholds for cumulative impacts (see Table 4.3-2 below).

TABLE 4.3-2: Single and Cumulative Construction Risk Assessment

Source	Maximum Cancer Risk (per million)	Maximum Annual PM2.5 Concentration (µg/m^3)	Maximum Hazard Index
Project Construction – Unmitigated Resident MEI – Mitigated Resident MEI	 **43** (infant) 8.8 (infant)	 0.25	 0.052
US Route 101 (400 feet from MEI)	43	0.28	0.03
State Route 92 (1350 feet from MEI)	4.6	0.033	3.0E-03
Local Roadway – Norfolk Street (580 feet from MEI)	1.0	0.016	--
Local Roadway – Fashion Island Boulevard (1300 feet from MEI)	1.1	0.021	--
Stationary Source – Plant 18585 – Diesel Generator at 250 feet from MEI	0.1	1.6E-04	3.2E-03
Stationary Source – Plant 112197 – Gasoline Dispensing Facility at 450 feet	1.3	0.00	6.5E-03
Stationary Source – Plant 14981 – Diesel Generator at 250 feet from MEI	4.3E-03	5.4E-06	1.6E-04
Combined Sources at Residential MEI - Unmitigated Construction - Mitigated Construction	 94 60	 0.59 0.40	 0.095 0.054
BAAQMD Threshold – Single Source	*10.0*	*0.3*	*1.0*
Significant?	**Yes**	No	No
BAAQMD Threshold – Cumulative Sources	*>100*	*>0.8*	*>10.0*
Significant?	*No*	*No*	*No*

Source: Illingworth & Rodkin, March 2018

Impact AQ-1: Construction of the proposed project would temporarily result in cancer risk exposure at the MEI at levels above the BAAQMD significance threshold based on combined exhaust and fugitive dust emissions. **(Significant Impact)**

Mitigation Measures: The following mitigation measure shall be implemented to reduce cancer risk and $PM_{2.5}$ exposure for nearby receptors.

MM AQ-1.1: Prior to the issuance of demolition permits, the project applicant shall submit an Emissions Reduction Plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average of at least 79 percent reduction in DPM exhaust emissions or greater. The plan shall be submitted to

the Community Development Director prior to issuance of a demolition permit and shall include the following:

Mobile diesel-powered off-road equipment included in the list below shall, at a minimum, be equipped with CARB-certified Level 3 Diesel Particulate Filters:

- All Excavators and Tractors/Loaders/Backhoes in Site Preparation Phase
- All Graders and Rollers in Grading phase
- All Rubber Tired Dozers and Rollers (Paving phase)
- All equipment in the Building Construction phase (graders, off-highway trucks, rough terrain forklifts, skid steer loaders, tractor/loaders/backhoes)
- All Off-highway trucks (Site Preparation, Grading, and Building Construction phases)

MM AQ-1.2: Alternatively, in lieu of use of Diesel Particulate Filters identified in MM AQ-1.1, the construction contractor may use other measures to minimize construction period DPM emissions to reduce the estimated cancer risk and $PM_{2.5}$ exposure below BAAQMD thresholds. For example, use of Tier 4 equipment or alternatively-fueled equipment (i.e., non-diesel or electric), added exhaust devices, or a combination of these measures could meet this requirement. Any alternative measures shall reduce DPM emissions to the same level or greater than MM AQ-1.1. If any of these alternative measures are proposed, the project applicant shall include them in the Emissions Reduction Plan, which shall include specifications of the equipment to be used during construction.

The Emissions Reduction Plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying the equipment included in the plan meets the standards set forth in this mitigation measure.

Implementation of the BAAQMD Basic Construction Mitigation Measures would reduce exhaust emissions by five percent and fugitive dust emissions by over 50 percent. Implementation of MM AQ-1.1 (or MM AQ-1.2) would further reduce on-site diesel exhaust emissions by at least 85 percent when combined with the BAAQMD Basic Construction Mitigation Measures. With mitigation, the maximum increased lifetime residential cancer risk from construction (assuming infant exposure) would be 8.8 in one million or less. Thus, the impact would be less than significant. **(Less than Significant Impact with Mitigation)**

4.3.2.4 *Odor Impacts (Checklist Question e)*

The project would not include any sources of significant odors that would cause complaints from surrounding uses. Nor is the site exposed to any substantial odor sources.

During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and not likely to be noticeable for extended periods of time much beyond the project's site boundaries. The potential for diesel odor impacts during construction is therefore less than significant. **(Less than Significant Impact)**

4.3.3 Project Air Quality Issues Not Covered Under CEQA

As described in *Section 4.0*, on December 17, 2015, the California Supreme Court issued an opinion in the CBIA vs. BAAQMD case holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents unless the project risks exacerbating those environmental hazards or risks that already exist. Although it is not mandated by CEQA, additional analyses may be undertaken to disclose the impacts the existing environment may pose to future receptors at the site of a project, and jurisdictions may require this as a policy. The City has policies and regulations that address existing conditions affecting a proposed project, such as exposing future residents of a development to harmful levels of TACs (General Plan Policy LU 8.11), which are discussed below. The City of San Mateo relies on the BAAQMD threshold established for cumulative sources when determining a site's acceptable exposure to TACs.

4.3.3.1 *Toxic Air Contaminants and Community Risk to On-Site Receptors*

In its air quality technical report, *Ramboll* conducted a HRA and utilized the BAAQMD screening tools to evaluate the health risk posed to future receptors from sources of TACS within the 1,000 foot "Zone of Influence" of the project site. The health risks and hazards to future on-site sensitive receptors from existing sources (for example, stationary sources, traffic, and other nearby foreseeable future construction sites) within 1,000 feet of the project site were analyzed and compared to significance thresholds. Three stationary sources were identified within 1,000 feet of the project site (refer to Figure 2 in Appendix A). Two roadways within 1,000 feet of the proposed project site that have traffic volumes over 5,000 Average Daily Traffic (ADT) were identified (Norfolk Street and Fashion Island Boulevard). There are two highways within 1,000 feet of the project site: US Route 101 to the west and State Route 92 to the north.

Table 4.3-3 shows a summary of the estimated cumulative cancer risks, noncancer chronic HIs and $PM_{2.5}$ concentrations for each of the source types evaluated for the project. Due to the proximity of US-101 to the proposed project, a more refined analysis was performed to obtain the impacts from the highway. As seen in Table 4.3-3 below, the estimated maximum excess lifetime cancer risk of 118 in a million and $PM_{2.5}$ concentration of 0.82 $\mu g/m^3$, due to roadway and stationary sources exceed the BAAQMD threshold of 100 in one million and 0.8 $\mu g/m^3$, respectively. The cumulative noncancer chronic HI value at 0.088 is below the BAAQMD threshold of 10. The highest impact occurs along the western edge of the development bordering US-101.

Table 4.3-3: On-Site Health Risk Assessment

Source[1]	**Lifetime Excess Cancer Risks (in a million)**	**Noncancer Chronic HI**	**$PM_{2.5}$ Concentration [$\mu g/m^3$]**
Stationary Sources	2.1	0.011	0.00066
Roadways	5.7	--	0.094
SR 92	12	8.0 E-03	0.085
Total (100 feet from US 101)[2]	118	0.088	0.82
Total (200 feet from US 101)[2]	87	0.066	0.61
Total (500 feet from US 101)[2]	57	0.044	0.41
Total (900 feet from US 101)[2]	44	0.035	0.33
Cumulative Threshold	*100*	*10*	*0.8*

Table 4.3-3: On-Site Health Risk Assessment			
Source[1]	**Lifetime Excess Cancer Risks (in a million)**	**Noncancer Chronic HI**	**$PM_{2.5}$ Concentration [$\mu g/m^3$]**
Exceeds Cumulative Thresholds?	**Yes**	**No**	**Yes**
With Merv-13 Filtration[3]	74		0.44
Exceeds Cumulative Thresholds?	**No**	**No**	**No**

Notes:
1. The onsite impact from stationary sources, local streets and SR-92 were conservatively estimated using the minimum distances between the sources and the project boundary. Due to its proximity and impacts to the development, the impacts from US-101 were calculated at various distances onsite away from the highway; these impacts at various distances were added to the conservative impacts from the other sources to obtain the total cumulative impacts.
2. Total impacts from all surrounding sources. For example, total impacts at 100 feet from US-101 were calculated by summing the impacts from stationary sources, local streets, SR-92 and US-101 impacts at 100 feet away.
3. Since the maximum onsite impact was calculated to be along the western edge of the project boundary (i.e. 100 feet from US-101), filtration analysis was conducted for the lifetime excess cancer risk and $PM_{2.5}$ concentration impacts at that location.

HI=Hazard Index, MERV=Minimum Efficiency Reporting Value, $PM_{2.5}$=particulate matter with an aerodynamic diameter of 2.5 microns or less, SR = state route, $\mu g/m^3$=microgram per cubic meter

MERV-13 FILTRATION SYSTEMS LOCATION MAP | FIGURE 4.3-1

In accordance with the City's General Plan and General Plan Policy LU-8.11, the proposed project will be required, as Conditions of Project Approval, to implement the following measures.

Conditions of Approval

- Since the operation of the proposed project could result in health risk impacts to future residents along western edge of the development bordering US-101, the project would install filters with Minimum Efficiency Reporting Value (Merv) of 13 in the ventilation vents.

- After taking into account impact reduction by implementing MERV-13 filtration system, the maximum onsite cancer risk impact reduces to 74 in a million and $PM_{2.5}$ concentration reduces to 0.44 $\mu g/m^3$. Therefore, the impacts would be below BAAQMD significance thresholds if filtration systems are implemented in every residential unit in proposed buildings SFD1, B1, B2 and TH1, as depicted in Figure 4.3-1.

With implementation of the standard conditions of approval listed above, the proposed project would be consistent with General Plan Policy LU-8.11.

4.3.4 Conclusion

The proposed project would not conflict with an applicable air quality plan. The proposed project is below the BAAQMD thresholds for operational and construction impacts to local and regional air quality. The proposed project, with the implementation of MM AQ – 1.1, MM AQ-1.2, and project conditions of approval would result in less than significant air quality impacts related to TACs and $PM_{2.5}$. **(Less Than Significant Impact with Mitigation)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based in part on a Biological Reconnaissance Resources Report prepared by *WRA* in June 2018, and a Tree Assessment prepared by *Monarch Consulting Arborists LLC* in March 2018. Copies of these reports can be found in Appendix B of this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Special-Status Species

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered 'special-status species.' Federal and state "endangered species" legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project will result in the "take" of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species. "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Guidelines. These may include plant species of concern in California listed by the California Native Plant Society and CDFW listed "Species of Special Concern".

Migratory Bird and Birds of Prey Protections

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA. Additionally, nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code (CFGC) Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Waters of the United States

The United States Army Corps of Engineers (Corps) regulates "Waters of the United States" under Section 404 of the CWA. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the Corps

Wetlands Delineation Manual (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated at a sufficient depth and for a sufficient duration to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water mark (OHWM). Other waters, for example, generally include lakes, rivers, and streams. The placement of fill material into Waters of the U.S. generally requires an individual or nationwide permit from the Corps under Section 404 of the CWA.

Waters of the State

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The Regional Water Quality Control Board (RWQCB) protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the Corps under Section 404. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State, are required to comply with the terms of the Water Quality Certification determination. If a proposed project does not require a federal permit but does involve dredge or fill activities that may result in a discharge to Waters of the State, the RWQCB has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.

San Francisco Bay and Shoreline

The San Francisco Bay Conservation and Development Commission (BCDC) has regulatory jurisdiction, as defined by the McAteer-Petris Act, over the San Francisco Bay and its shoreline, which generally consists of the area between the shoreline and a line 100 feet landward of and parallel to the shoreline. In areas supporting tidal marsh vegetation, BCDC's jurisdiction over San Francisco Bay includes areas below the elevation of five feet above mean sea level (MSL). In areas where tidal marsh vegetation is absent, BCDC Bay jurisdiction includes areas below the elevation of mean high water (MHW). The 100-foot shoreline band extends 100 feet landward from the elevation of BCDC Bay jurisdiction.

Local

City of San Mateo General Plan

Applicable General Plan policies related to biological resources include, but are not limited to, the following listed below.

Policies	Description
C/OS 6.1	Preserve heritage trees in accordance with the City's Heritage Tree Ordinance.
C/OS 6.2	Require significant replacement planting when the removal of heritage tree is permitted.

Policies	Description
C/OS 6.3	Require the protection of heritage trees during construction activity; require that landscaping, buildings, and other improvements located adjacent to heritage trees be designed and maintained to be consistent with the continued health of the tree.
C/OS 6.4	Retain the maximum feasible number of trees and preserve the character of stands or groves of trees in the design of new or modified projects.

City of San Mateo Heritage Tree Ordinance

The City's Heritage Tree Ordinance (Chapter 13.52 of the Municipal Code) established the intent of preserving as many of these significant trees as possible through the regulation of removal and pruning. The Parks and Recreation Department of the City of San Mateo defines heritage trees as any of the following:

- Any bay (Umbellularia californica), buckeye (Aesculus spp.), cedar (Cedrus) or redwood (Sequoia) tree that has a diameter of ten inches or more at 48 inches above natural grade;
- Any tree or stand of trees designated by City Council as having historical or significant community benefit;
- A stand of trees in which each are dependent on the others for survival; and
- Any tree with a trunk diameter of 16 inches or more at 48 inches above natural grade.

The project site contains 233 trees comprised of 22 different species. A permit to remove a tree or trees shall only be issued by the Parks and Recreation Director upon application therefore, and after an investigation is made. Said application shall contain the number, location, and species of the trees to be removed, a brief statement of the reason for removal, a plot plan, as well as such other pertinent information the Parks and Recreation Director deems necessary in their investigation (City of San Mateo 2018).

City of San Mateo Municipal Code

Chapter 23.72.080 (a)(7) of the Municipal Code states the use of invasive plant species, such as those listed by the California Invasive Plant Council, is prohibited.

The City's Site Development Code (Chapter 23.40 of the Municipal Code) establishes administrative procedures, regulations, required approvals, and performance standards for site grading, construction on slopes, and removal of major vegetation. The regulations apply to site development occurring within any of the following provisions:

- Grading will exceed an area of 5,000 square feet and 5,000 cubic feet (185 cubic yards);
- Grading will exceed a volume of 550 cubic yards;
- Grading, regardless of quantity, where, in the opinion of the Building Official and/or City Engineer, includes special physical conditions which necessitate the application of this chapter to protect public health and safety;
- Construction is proposed on a slope of 15 percent or greater; and/or
- Removal of major vegetation (trees over six inches in diameter) is proposed.

The intent of the ordinance is to protect public and private lands from erosion and earth movement, minimize the risk of injury to persons and damage to property, and ensure that each development relates to adjacent lands to minimize physical problems.

4.4.1.2 *Existing Conditions*

The project site is located approximately two miles west of the San Francisco Bay. The project site is located on a flat developed parcel with elevations ranging from approximately six to eight feet above mean sea level. A reconnaissance-level field survey was conducted by *WRA* in June 2018.

Biological Communities

WRA observed three biological communities within the project site including: developed areas, artificial ponds, and a portion of Borel Creek.

Non-Sensitive Biological Communities

Developed Areas. Developed areas cover approximately 9.34 acres of the project site. These areas consist of office buildings, paved walkways, paved parking lots, and ornamental plantings. Developed areas are highly disturbed and covered mostly by paved surfaces. Unpaved areas are dominated by a diverse array of ornamental trees and shrubs, such as blackwood acacia (Acacia melanoxylon), red ironbark (Eucalyptus sideroxylon), sweetgum (Liquidambar styraciflua), common juniper (Juniperus communis), Lombardy poplar (Populus nigra), box (Pittosporum sp.), and coast live oak (Quercus agrifolia). Ruderal non-native invasive grasses, such as slender oat (Avena barbata), ripgut brome (Bromus diandrus), and soft brome (Bromus hordeaceus), and ruderal non-native forbs, such as prickly lettuce (Lactuca serriola) and spiny sowthistle (Sonchus asper), grow amid ornamental plantings in these areas. Additionally, dense patches of highly invasive iceplant (Carpobrutus edulis), English ivy (Hedera helix), and cape ivy (Delairea odorata) are common in the developed land cover type (Cal-IPC 2018). Developed areas are not considered a sensitive community under CEQA.

Artificial Ornamental Pond. The project site contains two artificial, ornamental reflecting ponds that appear to receive water through a series of pipes and controls observed in the vicinity of the pond. A large pond, located in the central portion of the Study Area, contains several aeration fountains and is bounded by boulders. This pond supports a small fringe area of sparse aquatic vegetation, including sedge (Carex sp.) and common horsetail (Equisetum arvense). The vegetation appeared to be ornamental and regularly maintained for aesthetic purposes. Another smaller, shallow ornamental pond (two to three inches deep) is located approximately 170 feet northeast of the larger pond and is lined with cobblestone. Ornamental trees and grasses line both ponds, which were undergoing maintenance at the time of the survey.

Based on a review of historical aerial imagery, the ponds were excavated from uplands as part of the business park development circa 1979 (Historic Aerials 2018). Prior to the construction of the office park, the area had been filled by previous development activities. Water appears to be pumped into the ponds and circulated through pipes and fountains. The pumped water was the only observable source of hydrological input. If the pumps were shut off, the ponds would not continue to receive hydrologic input as the ponds are isolated from other hydrological features.

According to the Corps regulations as published with their preamble in 1986, artificial reflecting ponds constructed in uplands are not considered a waters of the U.S. Therefore, the pond features are presumed to be excluded from jurisdiction under the CWA and RWQCB and are thus not considered to be a sensitive community under CEQA.

Sensitive Biological Communities

Borel Creek. Approximately 0.66 acres of Borel Creek occurs within the project area's boundary. Borel Creek is a channelized perennial creek that was historically a tidally influenced tributary to Seal Slough. Tidal influence in the creek is now minimal due to active management of water levels in Seal Slough. During the site visit, water was stagnant with large algal blooms occurring west of the bridge. Vegetation along the creek banks was mostly non-native upland weeds and included iceplant, slender oat, ripgut brome, and soft brome. Ornamental trees such as blackwood acacia and red ironbark line the creek above the top of bank elevation and bordering the parking lot. A freespan bridge crosses Borel Creek in the northern region of the project site. Borel Creek is considered a sensitive biological community under CEQA as it is a perennial creek subject to Corps and RWQCB jurisdiction under Sections 404 and 401 of the CWA and CDFW jurisdiction under Section 1602 of the CFGC. Borel Creek and the adjacent shoreline is not anticipated to be subject to the regulatory jurisdiction of BCDC because it is located inland of tide gates along Seal Slough.

Special Status Species

Special-Status Plant Species

The project site is largely developed, and unpaved areas are dominated by ornamental plantings and weedy species which are regularly maintained by grounds crew. Hydrologic conditions, soil conditions, and biological communities necessary to support the special-status plant species are not present in the project area

Special-Status Wildlife Species

54 special-status wildlife species are known to occur in the vicinity of the project area. For a list of species and their potential for occurrence on the site, refer to Appendix B of this Initial Study. Special-status species likely to occur within the project area include: Nuttall's woodpecker (Picoides nuttallii), oak titmouse (Baeolophus inornatus), and Allen's hummingbird (Selasphorus sasin). Seal Slough is diked on the north end and has tide gates on the south end; therefore, connection with San Francisco Bay is controlled and minimized. The potential for presence of special-status fish species is unlikely. Surrounding development precludes the presence of most species and reduces potential for species to move into the project area or support special-status mammals, reptiles, and amphibians. In addition, the distance of the project site, which is one mile from marsh habitat, precludes the presence of two federal and state listed species (California's Ridgeway's Rail and Salt Marsh Harvest Mouse) associated with Seal Slough at its connection with San Francisco Bay.

4.4.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐	1,2,3,12
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☒	☐	1,2,3,12
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	1,2,3,12
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1,2,3,12
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	1,2,3,5,13
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1,2,3

4.4.2.1 *Impacts to Special-Status Species (Checklist Question a)*

Special-Status Plant Species

Due to the developed and disturbed nature of the site and surrounding properties, the site is unlikely to support any special-status plant species documented in the vicinity. Therefore, no impacts special-status plant species are anticipated to occur. **(No Impact)**

Special-Status Wildlife Species

As discussed in *Section 4.4.1.3*, of the 54 special-status wildlife species known to occur in the vicinity of the project area, three were determined to have the potential to occur within the project site. Most of the species found in the review of background literature occur in habitats not found within the project area. Habitat suitability for forest or marsh-associated species in the project area is reduced due to habitat modification and disturbance. Lack of connectivity to San Francisco Bay reduces potential for the presence of special-status fish species. As described above, the aquatic areas in the proximity of the site do not have the potential to support salt marsh harvest mouse, California Ridgway's rail, or other special status marsh species. Therefore, no impacts to special-status mammals, reptiles, amphibians, fish or invertebrates are anticipated to occur. **(Less Than Significant Impact)**

4.4.2.2 *Impacts to Sensitive Natural Communities (Checklist Question b)*

The majority of the Study Area is comprised of developed areas, landscaped ornamentals, and non-native annual grasses and forbs which are not considered sensitive under CEQA. Additionally, the artificial ponds within the Study Area are not considered a sensitive community under CEQA because they are presumed to be non-jurisdictional under the CWA based on the exemptions in the preamble to the Clean Water Act definition of waters of the U.S. This presumption of non-jurisdictional status is based on the fact that the ornamental ponds were excavated in previously filled areas and are supported hydrologically only by piped water sources. If the piped water source were turned off, the ornamental ponds would no longer contain water. These concepts are also applicable to regulations covering waters of the State. The features do not function as natural communities and do not warrant special protection under CEQA.

The portion of Borel Creek within the Study Area is potentially subject to the jurisdiction of the Corps and RWQCB under Sections 404 and 401 of the CWA and the jurisdiction of CDFW under the CFGC. According to provided project plans and description, no work would occur below top of bank of Borel Creek. With the implementation of standard BMP's (i.e. silt fencing, wattles) during construction, it is anticipated that Borel Creek would be entirely avoided by the project; therefore, no impacts to sensitive communities would occur and no further recommendations or mitigation measures are provided.

Although not proposed, if, however, riparian trees or riparian habitat are removed, a CDFW Lake and Streambed Alteration Agreement and RWQCB 401 water quality certification would be required. **(Less Than Significant Impact)**

4.4.2.3 *Federally Protected Wetlands (Checklist Question c)*

The site does not contain federally protected wetlands, therefore, the project would have no impacts to wetlands. **(No Impact)**

4.4.2.4 *Impacts to Nesting Birds (Checklist Question d)*

For many species, a landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. The project site is surrounded by development and has experienced human

disturbance, therefore, the proposed project would not result in fragmentation of natural habitats. Three special status birds i.e. Nuttall's woodpecker (Picoides nuttallii), oak titmouse (Baeolophus inornatus), and Allen's hummingbird (Selasphorus sasin), and many common bird species protected under MBTA and CFGC have potential to occur within the project area. Vegetation removal, construction, or other activities occurring within the nesting season (February 1-August 30) have potential to impact any nesting birds.

Impact BIO-1: Construction of the proposed project could result in impacts to nesting birds on or adjacent to the site, if present. Disturbance of raptor or other migratory bird nests present in any on-site or adjacent trees during construction activities could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW. **(Significant Impact)**

Mitigation Measure: The following mitigation measures will be implemented during construction to reduce impacts to nesting birds and reduce these impacts to a less than significant level.

MM BIO-1.1: Construction activities (or at least the commencement of such activities) should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside of the nesting season, all impacts on nesting birds protected under the MBTA and CDFW will be avoided. The nesting season for most birds in San Mateo County extends from February 1st through August 30th).

MM BIO-1.2: If it is not possible to schedule construction activities between September 1 and January 31 then preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. These surveys shall be conducted no more than 14 days prior to the initiation of construction. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests)

MM BIO-1.3: If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that nests of species protected by the MBTA and CDFW shall not be disturbed during project implementation.

MM BIO-1.4: If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1st).

The proposed project, with implementation of the above mitigation measures, would reduce impacts to nesting birds (if present) to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.4.2.5 *Heritage Trees (Checklist Question e)*

As discussed above, the project site contains 233 trees comprised of 22 different species (See Table 4.4-1 below). 95 trees out of the 233 are growing within the proposed setback outside the buildable area. The remaining 138 trees are located within the buildable area throughout the interior. Out of the 233, 65 trees qualify as "Heritage Trees". The project proposes to remove all the 233 trees for the construction of the proposed project (65 "Heritage Trees" and 168 others). The project would be removing all the trees due to pervasive young bay mud soil conditions which would require ground improvement strategies throughout the site to avoid unacceptable foundation settlement. These grading and surcharging activities will impact all trees on the project site, including 65 heritage trees and perimeter trees. The preservation of trees on the project site would be infeasible without compromising foundation stability or without creating unacceptable grade differentials between existing trees and the finished grade of development pads. The applicant will comply with the City of San Mateo Heritage Tree Ordinance through a combination of paying into the City Street Planting Fund and providing replacement trees on site in accordance with the Landscape Unit values assigned to the trees removed. The average LU Value was calculated at 3.47 for all trees assessed.

Table 4.4-1: Tree Species Observed

Common Name	Scientific Name	Heritage Trees	Total No. of Trees
Alder	Alnus rhombifolia	10	11
Ash	Fraxinus velutina	1	33
Birch	Betula pendula	0	14
Black acacia	Acacia melanoxylon	14	55
Blue gum	Eucalyptus globulus	3	3
Cherry	Prunus serrulata	0	17
Coast live oak	Quercus agrifolia	1	1
Deodar cedar	Cedrus deodara	4	4
Dwarf blue gum	Eucalyptus globulus 'Compacta'	8	13
Fern pine	Afrocarpus gracilior	0	1
Hornbeam	Carpinus betulus	0	8
Jacaranda	Jacanda mimosifolia	0	2
Japanese maple	Acer palmatum	0	1
Maple	Acer sp.	0	1
Ornamental pear	Pyrus kawakami	0	3
Pear	Pyrus calleryana	0	7
Red gum	Eucalyptus camaldulensis	1	4
Red ironbark	Eucalyptus sideroxylon	3	4
Silver acacia	Acacia dealbata	0	3

Table 4.4-1: Tree Species Observed			
Common Name	**Scientific Name**	**Heritage Trees**	**Total No. of Trees**
Silver dollar gum	Eucalyptus polyanthermos	5	14
Sweet gum	Liquidambar styraciflua	14	33
Weeping willow	Salix babylonica	1	1
	Total:	65	233

Conditions of Approval

The following condition of approval would be applied to the proposed project due to the removal of all the 233 existing trees on-site, out of which 65 trees qualify as heritage trees.

- The applicant shall obtain a Site Development Permit from the Planning Division for removal of existing trees with a diameter of six inches or larger, prior to the issuance of a Site Development Permit or demolition building permit, whichever is issued first. The applicant shall plant trees on the project site equivalent to the Landscape Unit (LU) value of trees to be removed or pay a fee in lieu of planting trees at the rate established in the annual Comprehensive Fee Schedule.

The City of San Mateo has established a Heritage Tree Ordinance that provides protection and replacement requirements for trees designated as Heritage Trees. The project site currently contains 65 Heritage Trees, as defined in Municipal Code Chapter 13.52, which is proposed for removal. Removal of one of more Heritage Trees requires application for a removal permit from the Director of Parks and Recreation. Permits for Heritage Tree removal require replanting in accordance with the following guidelines:

- Trees removed under jurisdiction of a planning approval pursuant to Chapter 27.71 shall conform to the replacement conditions specified in the planning approval.

- Trees removed with a valid tree removal permit shall be replaced in accordance with the direction of the Director. Replacement direction shall include direction on the location and species of the replacement tree. Tree replacement shall be one 24" box size tree approved by the Director, for each tree removed.

- Trees removed without a valid tree removal permit shall be replaced by a 48" box size tree for each tree removed. Enhanced replant conditions may be imposed if it is determined by the Director that the value of the removed tree was significantly greater than that of a 48" box tree. In such cases, the determination of the level of replacement shall be within the discretion of the Director, but shall not exceed the actual tree loss as determined by the Replacement Value. In addition to the requirements of this subsection, penalties under Section 13.52.055 or other sanctions allowed by law may be imposed for removal of Heritage Trees without a permit.

- Where the Director determines that replanting is not feasible and/or appropriate, e.g., sufficient trees exist on site, the Director (1) may require that a payment of equal value to the cost of the purchase and installation of the replacement tree(s) be made to the City tree planting fund or (2) may place other conditions on the permit which are of equal value to the cost of the purchase and installation of the replacement tree(s).

The proposed project proposes to plant 287 new trees as part of project's landscaping, which would replace removed trees at a minimum of 1:1 ratio. For this reason, the project would be consistent with the City's policy regarding tree removal and replacement, and would not result in significant impacts to trees. **(Less Than Significant Impact)**

4.4.2.6 *Habitat Conservation Plan (Checklist Question f)*

There is no applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP), or other approved local, regional, or state habitat conservation plan for the City of San Mateo. As a result, there will be no impact with regard to conflict with the implementation of such plans. **(No Impact)**

4.4.3 Conclusion

The proposed project, with implementation of MM BIO-1.1 to MM BIO-1.4 and replanting of new trees would not result in significant biological resources impacts. **(Less Than Significant Impact with Mitigation Incorporated)**

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 (as amended) is the primary federal law dealing with historic preservation. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consult with the Advisory Council on Historic Preservation to consider the effects of their undertakings on historic properties.

National Register of Historic Places

The National Historic Preservation Act is the primary federal law dealing with historic preservation. The historic significance of a building, structure, object, site, or district for listing is assessed based upon the criteria in the National Register of Historic Places (NRHP). A resource is considered eligible for the NRHP if the quality of significance in American history, architecture, archaeology, engineering, and culture is present and if the resource includes integrity of location, design, setting, materials, workmanship, feeling, and association and:

- Is associated with events that have made a significant contribution to the broad pattern of our history; or
- Is associated with the lives of persons significant to our past; or
- Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possessed high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

State

California Register of Historical Resources

The California Register of Historical Resources (CRHR) was created to identify resources deemed worthy of preservation and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP, which includes resources of local, state, and regional and/or national levels of significance. A CRHR-eligible resource generally must be greater than 50 years old and significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or important creative individual, or possesses high artistic values.

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Properties of local significance designated under a local preservation or identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be historical resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise.

Tribal Cultural Resources

Assembly Bill (AB) 52 requires that tribal cultural resources be considered under CEQA. A tribal cultural resource can be a site, feature, place, object, or cultural landscape with value to a California Native American tribe that is also eligible for listing on the CRHR. AB 52 includes a broad definition of what may be considered to be a tribal cultural resource, and includes a list of recommended mitigation measures for potential impacts. AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

The City of San Mateo has contacted the local tribes regarding the proposed project and has received no requests for consultation.

Cultural and Paleontological Resources

Archaeological, paleontological, and historical sites are protected by a number of state policies and regulations under the California Public Resources Code, California Code of Regulations (Title 14 Section 1427), and California Health and Safety Code. California Public Resources Code Sections 5097.9-5097.991 require notification of discoveries of Native American remains and provides for the treatment and disposition of human remains and associated grave goods.

State law requires that the San Mateo County Coroner be notified if cultural remains are found on a site. If the Coroner determines the remains are those of Native Americans, the Native American Heritage Commission and a “most likely descendant” must also be notified.

Senate Bill 18

The intent of Senate Bill 18 (SB 18) is to aid in the protection of traditional tribal cultural places through local land use planning by requiring city governments undertaking general plan updates and amendments (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.) to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The project does involves a General Plan Amendment, therefore, SB 18 is applicable.

Paleontological Resources Regulations

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield

about the history of the earth and its past ecological settings. The California Public Resources Code (Section 5097.5) specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it will disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

County of San Mateo General Plan

The San Mateo County General Plan addresses the identification, conservation, and protection of cultural and historic resources in the County (General Plan Policies 5.10 through 5.26).

City of San Mateo General Plan

Applicable General Plan policies related to cultural resources include, but are not limited to, the following listed below.

Policies	Description
C/OS 7.1	Preserve, to the maximum extent feasible, archaeological sites with significant cultural, historical, or sociological merit.
C/OS 8.1	Historic Preservation. Preserve, where feasible, historic buildings as follows: • Prohibit the demolition of historic buildings until a building permit is authorized subject to approval of a planning application. • Require the applicant to submit alternatives on how to preserve the historic building as part of any planning application and implement methods of preservation unless health and safety requirements cannot be met. • Require that all exterior renovations of historic buildings conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Structures. • Historic building shall mean buildings which are on or individually eligible for the National Register or Downtown Historic District contributor buildings as designated in the 1989 Historic Building Survey Report, or as determined to be eligible through documentation contained in a historic resources report. The City Council by resolution may add or delete any building which it finds does, or does not, meet the criteria for the National Register or other criteria
C/OS 8.4	Structure Rehabilitation. Promote the rehabilitation of historic structures; consider alternative building codes and give historic structures priority status for available rehabilitation funds.
C/OS 8.5	Public Awareness. Foster public awareness and appreciation of the City's historic, architectural, and archaeological resources.

City Zoning Code Requirements

Chapter 27.66 Historic Preservation of the City's Zoning Code (Municipal Code) requires public review and submittal of a Site Plan and Architectural Review planning application for any individually eligible building for the National Register of Historic Places or contributor building in the Downtown. Any modifications are evaluated for conformance with the Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Structures.

4.5.1.2 *Existing Conditions*

Many Native American sites are recorded within the San Mateo City limits. Flat valley terraces adjacent to San Mateo Creek, and the original bay margins are the most sensitive for Native American archaeological deposits and cultural materials. The project site is located adjacent to Borel Creek, approximately 1.8 miles south of San Mateo Creek and approximately 1.3 miles north of Laurel Creek. Borel Creek was reconfigured and channelized sometime between 1946 and 1956 (Historic Aerials 2018).

According to the City of San Mateo General Plan EIR, the City has been mapped for archaeological sensitivity and is divided into three sensitivity zones, based on documented archaeological sites (as of 1980). The high sensitivity zone includes recorded sites, primarily shell mounds and near creeks, and the immediately adjacent areas which are favorable sites. The medium sensitivity zone includes areas surrounding the high sensitivity areas and other locales where, while no sites are recorded, the settings are similar to those where recorded sites do occur. The majority of the City is in a low sensitivity zone wherein archaeological resources are not generally expected but may occur. While the site is currently developed, there is a potential for the project to impact unknown subsurface archaeological resources, if they are present. According to the City's archaeological sensitivity map, the project site is located in a low sensitivity area.

The project site is fully developed and does not contain any structures more than 50 years old. The business park, including the three building structures with associated parking lots, was built in 1979. The site is not in proximity to any NRHP-listed or CRHR-listed buildings. The buildings on the project site have not been identified by the City of San Mateo as architecturally or historically significant to warrant listing on the City's Historic Resources Inventory.

The City of San Mateo's General Plan EIR did not identify any known paleontological resources in the City of San Mateo. It is not expected that sensitive paleontological resources are present on the project site.

4.5.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5?	☐	☐	☐	☒	1,2,3
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	☐	☐	☒	☐	1,2,3
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☒	☐	1,2,3

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐	1,2,3
e) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
3. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	☐	☐	☐	☒	1
4. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.	☐	☐	☐	☒	1

4.5.2.1 *Impacts to Historic Resources (Checklist Question a)*

As stated above in *Section 4.5.1.2,* the project site is fully developed and does not contain any structures more than 50 years old. The business park, including the three building structures with associated parking lots, was built in 1979. Prior to development of the business park, the project site was undeveloped (Historic Aerials 2018). The site is not in proximity to any NRHP-listed or CRHR-listed buildings. For this reason, the proposed project would not impact historic resources. **(No Impact)**

4.5.2.2 *Impacts to Subsurface Resources (Checklist Question b, c, and d)*

There are no known buried historical or prehistoric resources on the site. The site has been previously disturbed for construction and development on the site. Furthermore, as described above in *Section 4.5.1.2*, the project site is located in an area of low archaeological sensitivity. While the project includes site clearing and excavation for utility trenching, for the reasons stated above, the project would not likely impact archaeological or paleontological resources. Although unlikely, the following standard conditions are required for the project in the event archaeological or paleontological resources are unexpectedly found during construction.

Conditions of Approval

The proposed project shall implement the following conditions of approval to reduce impacts to subsurface resources.

- In the event of the discovery of archaeological resources, the applicant shall be responsible for halting construction activities within 50 feet of the discovery, notifying the Chief of Planning, and retaining a qualified archaeologist. The archaeologist will be required to evaluate the uniqueness of the find and to contact local Native American and historical organizations, and shall recommend a further course of action.

- Should any potentially unique paleontological resources be encountered during development activities, work shall be halted immediately within 50 feet of the discovery. The City of San Mateo Planning Division shall be immediately notified, and the applicant shall be responsible for retaining the services of a qualified paleontologist to determine the significance of the discovery. The paleontologist shall evaluate the uniqueness of the find and prepare a written report documenting the find and recommending further courses of action. Based on the significance of the discovery, the actions may include avoidance, preservation in place, excavation, documentation, recovery, or other appropriate measures as determined by the paleontologist.

As noted above in Regulatory Framework, state law requires that the San Mateo County Coroner be notified if human cultural remains are found on a site. If the Coroner determines the remains are those of Native Americans, the Native American Heritage Commission and a "most likely descendant" must also be notified, then receipt of written recommendations for treatment of the remains from the "Most Likely Descendant". No work shall take place in the vicinity of the remains during this process. Remains should be turned over to the MLD post-discovery and notification provided to the above agencies.

4.5.2.3 *Tribal Cultural Resources (Checklist Question e)*

The proposed project requires a General Plan amendment to the *Medium Density Multi-Family* designation to allow residential uses onsite, and therefore, is subject to SB 18 requirements for consultation with California Native American tribes, as well as the requirements under AB 52. The City initiated the process of reaching out to local Native American tribes on October 26, 2018, and no tribes responded as having tribal cultural resources (e.g., sites, features, places, cultural landscapes, sacred places, and/or objects with cultural value) onsite. **(No Impact)**

4.5.3 Conclusion

The proposed project with implementation of standard measures described above would not result in significant impacts to cultural resources. **(Less Than Significant Impact)**

4.6 GEOLOGY AND SOILS

The following discussion is based, in part, on a Design-Level Geotechnical Investigation prepared by *ENGEO Inc.* in January 2018. A copy of this report is included in Appendix C of this Initial Study.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The AP Act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Areas within the Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault. The project site is not located in an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990 to protect the public from the effects of strong ground shaking, liquefaction, landslides, and other seismic hazards. The SHMA established a State-wide mapping program to identify areas subject to violent shaking and ground failure; the program is intended to assist cities and counties in protecting public health and safety. The California Geological Survey (CGS) is mapping SHMA Zones and has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, ground shaking, and landslides, which include the central San Francisco Bay Area and Los Angeles Basin.

California Building Standards Code

The California Building Standards Code (CBC) contains the regulations that govern the construction of buildings in California and prescribes standards for constructing safer buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments to evaluate seismic and geologic conditions that may affect a project, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Local

City of San Mateo General Plan

Various policies and actions of the City of San Mateo General Plan have been adopted for the purpose of avoiding or mitigating geology and soils impacts resulting from planned development within the City, including the following:

Policies	Description
S 1.1	Require a site specific geotechnical engineering studies, subject to the review and approval of the City Engineer and Building Official, for development proposed on sites identified in Figure S-1 of the City's General Plan as having a moderate or high potential for ground failure. Permit development in areas of potential geologic hazards only where it can be demonstrated that the project will not be endangered by, or contribute to, the hazardous condition on the site or on adjacent properties.
S 1.3	Require erosion control measures for all development sites where grading activities are occurring, including those having landslide deposits, past erosion problems, the potential for storm water quality impacts, or slopes of 15 percent or greater which are to be altered. Control measures shall retain natural topographic and physical features of the site if feasible.
C/OS 3.2	Regulate the location, density, and design of development throughout the City in order to preserve topographic forms and to minimize adverse impacts on vegetation, water, and wildlife resources.

City of San Mateo Site Development Code

The City's Site Development Code (Chapter 23.40 of the Municipal Code) establishes administrative procedures, regulations, required approvals, and performance standards for site grading, construction on slopes, and removal of major vegetation. In general, a planning application and a subsequent site development permit are required for development where grading exceeds 5,000 square feet in area; grading exceeding a volume of 550 cubic yards; removal of major vegetation (trees over six inches in diameter) is proposed; and construction is proposed on a slope of 15 percent or greater. The intent of the ordinance is to protect public and private lands from erosion and earth movement, minimize the risk of injury to persons and damage to property, and ensure that each development relates to adjacent lands to minimize physical problems.

4.6.1.2 *Existing Conditions*

Regional Geology

The project site is located within a flat-lying plain along the western edge of San Francisco Bay, bounded by the Santa Cruz Mountains on the west. The Coast Ranges is a geomorphic province of California that extends from the Oregon border nearly to Point Conception. The Coast Ranges in the Bay Area have developed on a basement of tectonically mixed Cretaceous- and Jurassic-age rocks of the Franciscan Complex (70 – 200 million years old). Younger sedimentary and volcanic units cap these rocks in the local area, and still younger surficial deposits that reflect geologic conditions of the last million years cover most of the Coast Ranges. Based on Google Earth, site grades generally range from Elevation six to eight feet.

Soils

Exploratory borings were drilled to investigate existing soils onsite. The soil type beneath the project site is classified as 'Urban Land' which reportedly exhibits very slow infiltration rates. The borings

generally encountered medium stiff to stiff and medium dense fill. The fill consisted of sandy clay and clayey sand that extended approximately six to eight feet below the ground surface (bgs). The site is underlain by highly compressible normally consolidated Young Bay Mud ranging from 20 to 22 feet thick, which extends from approximately Elevation 0 to Elevation -22 feet. In addition, a 10-foot-thick layer of Old Bay Clay between Elevations -48 to -58 feet was also found. Compared to Young Bay Mud deposits, the Old Bay Clay is considerably less compressible.

The soils onsite have a moderate to high expansion potential based. Expansive soil changes in volume with changes in moisture. It can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations.

The soils on the site are 'severely corrosive', therefore, buried metal and steel embedded in a concrete mortar coating in contact with site soils should be protected against corrosion.

Groundwater

Groundwater was encountered in the exploratory borings during drilling. The depth to groundwater was reported at approximately one to seven feet below ground surface (bgs) and the direction of groundwater flow is reported to the east. Fluctuations in groundwater levels should be expected during tidal changes, seasonal changes, or over a period of years because of precipitation changes, perched zones, and changes in drainage patterns, irrigation and other conditions.

Seismicity and Seismic Hazards

The San Francisco Bay Area is recognized by geologists and seismologists as one of the most active seismic regions in the United States. The major active faults in the project area include the San Andreas and San Gregorio to the west and the Hayward and Calaveras to the east. The site is located approximately 3.9 miles west of the San Andreas fault, 11.7 miles west of the San Gregorio fault, 14.5 miles east of the Hayward fault, and 21.8 miles east of the Calaveras fault. In addition, the site is located approximately 8.3 miles south of the potentially active Monta Vista-Shannon fault. Strong ground shaking is likely to occur during the lifetime of the proposed project as a result of movement along one or more of the regional active faults described above.

Based on the site investigation, no known active or potentially active faults crosses through the project site, and is not within an Earthquake Fault Zone of the State of California Alquist-Priolo Earthquake Fault Zoning Act.

Liquefaction

Soils generally most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands that lie within roughly 50 feet of the ground surface. Soils encountered during the exploratory borings predominantly consisted of sandy clay and clayey sand underlain by soft, fat clay to the maximum depth of 22 feet. The site is identified in Figure S-2 of the General Plan as area of 'high' liquefaction potential. Therefore, a site-specific geotechnical study was prepared for the site. Based on the analysis evaluated by the Geotechnical Investigation, the site is identified as very susceptible to liquefaction by the Association of Bay Area Governments (ABAG).

Lateral Spreading

Lateral Spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. The project site is bounded by Borel Creek on the north. Based on survey data provided by the City of San Mateo, Borel Creek is estimated to be approximately 10 to 12 feet deep. As discussed above, potentially liquefiable deposits are present below 25 feet. Because the liquefiable layers are discontinuous and located below the bottom of the creek channel, the risk of a flow failure of liquefied sand is low.

4.6.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
5. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42.)?	☐	☐	☒	☐	1,2,14
6. Strong seismic ground shaking?	☐	☐	☒	☐	1,2,14
7. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1,2,14
8. Landslides?	☐	☐	☒	☐	1,2,14
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	1,2,3,14
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	1,2,14
d) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial risks to life or property?	☐	☐	☒	☐	1,2,14
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1

4.6.2.1 *Seismicity and Seismic Impacts (Checklist Question a)*

Fault Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to cross the site, making fault rupture at the site unlikely. While existing faults are located within approximately 10 miles of the site (San Andreas Fault and San Gregorio Fault), the proposed project is outside of the fault rupture zone, and fault ruptures are not anticipated at the site.

Seismic Ground Shaking Hazards

As previously discussed, the project site is located in a seismically active region, and as such, strong to very strong ground shaking would be expected during the lifetime of the proposed project. While no active faults are known to cross the project site, ground shaking on the site could damage buildings and other proposed structures and threaten residents and occupants of the proposed development.

Conditions of Approval

Public Works Department shall implement the following standard measure to reduce seismic-related impacts.

- The new residential buildings and associated improvements shall be designed and constructed in accordance with current building code recommendations.

The existing seismic and seismic hazards conditions onsite would not be exacerbated by the proposed project such that is would impact (or worsen) off-site conditions. **(Less Than Significant Impact)**

Liquefaction

Liquefaction is a phenomenon in which, essentially cohesion less soils lose strength during strong seismic shaking and may experience horizontal and vertical movements. Soils that are generally most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine grained sands that lie within roughly 50 feet of the ground surface. Maps prepared by the ABAG indicate that the site has a very high potential for liquefaction.

The liquefiable layers are present at a depth of 25 feet bgs and do not appear to be in continuous layers throughout the site. The presence of a sufficient thickness of non-liquefiable layer on the surface may prevent the effects of at-depth liquefaction from reaching the surface. Considering the capping effects from overlying non-liquefiable layers and additional engineered fill to be placed to raise site grades, the soil above the potentially liquefiable soil is thick enough to resist upward pressure and the liquefiable lenses are thin enough to provide only a limited reservoir of water. Therefore, the impact would be less than significant. **(Less Than Significant Impact)**

Soil Densification

As a result of a large seismic events, liquefaction-induced settlement in the range of approximately 0.5 to two inches may occur at the project site. Densification of granular soil above the groundwater

level can cause settlement during an earthquake. Since the deposits encountered above groundwater at the site are generally cohesive, the potential for densification of granular soil above groundwater due to an earthquake is low. **(Less Than Significant Impact)**

4.6.2.2 *Soil and Groundwater Hazards (Checklist Question b, c, and d)*

Landslides

The project site will not be exposed to substantial slope instability, or landslide related hazards due to the relatively flat topography of the site and surrounding areas. **(Less Than Significant Impact)**

Lateral Spreading

Lateral spreading involves lateral ground movement caused by earthquake vibrations. These lateral ground movements are often associated with a weakening or failure of an embankment or soil mass overlying a layer of liquefied sand or weak soil.

The project site is bounded by Borel Creek on the north. Based on the design-level geotechnical report, Borel Creek is estimated to be approximately 10 to 12 feet deep. As discussed above, potentially liquefiable deposits are present below 25 feet. Because the liquefiable layers are discontinuous and located below the bottom of the creek channel, the risk of a flow failure of liquefied sand is low. **(Less Than Significant Impact)**

Soil Erosion

Construction of the proposed project would include grading of the site. Development of the proposed project could result in significant soil erosion, if not properly managed.

Conditions of Approval

In accordance with the General Plan and the City's Municipal Code, Site Development Code 23.40.040, the following condition of approval will reduce erosion control impacts to a less than significant level.

- The project will be required to provide erosion control measures [including silt fences, fiber rolls, proposed cribbing (retaining walls or riprap), terraces, and/or surface protection, required for drainage and erosion control of the property per the Municipal Code 23.40.040 (a) as a standard condition of approval prior to issuance of a building and/or site development permit, subject to review and approval of the Public Works Department. Conformance with these measures will reduce soil erosion during construction. The applicant will submit an Erosion and Sediment Control Plan (which includes erosion control measures), if required by the City Engineer or Building Official.

If the policies mentioned above are adhered to, the project would not substantially increase soil erosion on-site or contribute to the loss of topsoil, nor would the project create substantial risks to life and property due to expansive soils. **(Less Than Significant Impact)**

Soil Corrosion

As discussed in *Section 4.6.1.2 Existing Conditions*, the soils onsite are considered to be severely corrosive.

Conditions of Approval

The project proponent shall implement recommendations in the geotechnical investigation prepared, which includes, but is not limited to, retaining a corrosion consultant to provide specific long-term corrosion protection recommendations for buried metal, concrete pipes and foundations.

With implementation of the standard conditions of approval, the impact would be less than significant. **(Less Than Significant Impact)**

Expansive Soil

As discussed in *Section 4.6.1.2 Existing Conditions*, the soils onsite are considered to have a moderate to high expansion potential.

Conditions of Approval

The project proponent shall implement recommendations in the geotechnical investigation prepared, which includes, but is not limited to, using a rigid mat foundation that is designed to resist the settlement and heave of expansive soil, keeping footing trenches moist so any drying-shrinkage cracks are closed prior to placement of concrete, and/or using footings at normal shallow depths but bottomed on a layer of select fill having a low expansion potential.

With implementation of the standard conditions of approval, the impact would be less than significant. **(Less Than Significant Impact)**

Ground Water

According to the design-level geotechnical report, groundwater is expected to be shallow at the site and may fluctuate several feet each day. Considering this, ground water may be present during utility trench excavations extending beneath an elevation of 1 foot.

Conditions of Approval

The design-level geotechnical report recommends that a dewatering system be implemented during construction to keep the excavation and working areas reasonably dry. The excavations should be dewatered such that water levels are maintained at least two feet below the bottom of the excavation prior to and continuously during shoring installation and the backfill process.

With implementation of the standard condition of approval, the impact would be less than significant. **(Less Than Significant Impact)**

4.6.2.3 *Septic Tanks and Wastewater Disposal (Checklist Question e)*

The project site is located within an urbanized area of San Mateo where sewers are available to dispose of wastewater from the project site. No septic system would be required for the proposed project; therefore, no impacts related to septic systems would occur. **(No Impact)**

4.6.3 Conclusion

By adhering to the City policies regarding geology and soils established in the General Plan, the Municipal Code, and the Site Development Code, the proposed project, would not result in significant impacts (or worsen) existing geology and soil conditions. **(Less Than Significant Impact)**

4.7 GREENHOUSE GAS EMISSIONS

The following discussion is based, in part, upon a Greenhouse Gas Assessment prepared by *Ramboll US Corporation* in April 2018. The report is provided as Appendix D of this Initial Study.

4.7.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

4.7.1.1 *Regulatory Framework*

Federal

Clean Air Act

The USEPA is the federal agency responsible for implementing the Clean Air Act (CAA). The United States Supreme Court in its 2007 decision in *Massachusetts et al. v. Environmental Protection Agency et al.* ruled that carbon dioxide is an air pollutant as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. Following the court decision, the USEPA has taken actions to regulate, monitor, and potentially reduce GHG emissions (primarily mobile emissions).

State

California Global Warming Solutions Act (Assembly Bill 32)

Under the California Global Warming Solution Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020 of 427 MMTCO2e, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions will be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO2e.

Senate Bill 375 – Redesigning Communities to Reduce Greenhouse Gases

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring CARB to develop regional GHG

reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 when compared to emissions in 2005. The per capita reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, MTC partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission (BCDC) to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP) process. The SCS is referred to as *Plan Bay Area*.

Originally adopted in 2013 *Plan Bay Area*, established a course for reducing per-capita GHG emissions through the promotion of compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). Building upon the development strategies outlined in the original plan, *Plan Bay Area 2040* was adopted in July 2017 as a focused update with revised planning assumptions based on current demographic trends. Target areas in the *Plan Bay Area 2040* Action Plan area related to reducing GHG emissions, improving transportation access, maintaining the region's infrastructure, and enhancing resilience to climate change (including fostering open space as a means to reduce flood risk and enhance air quality).

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The City of San Mateo and other jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

City of San Mateo Sustainable Initiatives Plan

The sustainable Initiatives Plan (2007) addresses several areas of environmental responsibility for the City, including citywide sources of GHG emissions, impacts from new developments and construction, city planning, waste and resource management, and all modes of transportation. The plan also addresses ways to engage the public and businesses in creating solutions to the environmental challenges. The Sustainable Initiatives Plan contains two sets of actions in regard to

climate change: a proactive approach, which reduces GHG emissions and therefore lessens the impacts on global warming, and the adaptive approach, which serves to ensure that the City is prepared for the inevitable change.

City of San Mateo Greenhouse Gas Emissions Reduction Program

The City prepared a Greenhouse Gas Emissions Reduction Program (2010) to summarize the City of San Mateo's GHG emissions and the actions being taken to mitigate those emissions. The emissions reduction program seeks to meet the requirements of the BAAQMD's Draft CEQA Guidelines and corresponding criteria for a Qualified GHG Emissions Reduction Strategy as defined by BAAQMD. The Greenhouse Gas Reduction Program calculates the GHG emissions reduction target and the impact of programs to achieve the target, consistent with state guidance.

The program demonstrates the City's ability to reduce its GHG emissions to 1990 levels by 2020 or approximately 28 percent below "business-as-usual" (BAU) forecasts in 2020. Based on a 2005 inventory prepared by the City, in order to achieve these emissions reduction targets, San Mateo would have to reduce its GHG emissions by 201,983 metric tons of CO2e by 2020. To remain on track to reach its 2050 target, the City would have to reduce its emissions by 458,560 metric tons of CO2e by 2030. This information was updated in the Climate Action Plan (CAP), as described below.

City of San Mateo Climate Action Plan

The City of San Mateo adopted a community-wide climate action plan (CAP) on April 2015, which updates and consolidates the City's existing Sustainable Initiatives Plan, GHG Emissions Reduction Plan, and Climate Action Plan for Municipal Operations and Facilities, based on the vision of San Mateo residents, business, and local government. The goal was to prepare a CAP that serves as an updated and Quantified GHG Reduction Strategy consistent with BAAQMD GHG Plan Level Guidance and CEQA Guidelines Section 15183.5. The CAP was developed through a robust public process that engaged the San Mateo Sustainability Commission, staff, and the community.

A climate action plan is a comprehensive strategy for a community to reduce emissions of GHGs, which, according to scientific consensus, are primarily responsible for causing climate change. The San Mateo CAP includes five key pieces:

1. An inventory of the annual GHG emissions attributable to San Mateo based on types of activities occurring within the community and guidance from various protocols and agencies. The City has inventories of emissions for 2005 and 2010.
2. A forecast of what GHG emissions are likely to look like in 2020 and 2030, based on expected population and economic growth adopted in the General Plan.
3. A reduction target, which identifies a goal for reducing GHG emissions by 2020 and 2030.
4. Reduction strategies, which describe the actions the community intends to take to achieve the reduction target. Each strategy identifies the amount of GHGs that will be reduced once the strategy is implemented. The CAP also estimates benefits of existing programs.
5. An implementation and monitoring program to track progress toward the reduction target and the status of the reduction strategies. A CAP consistency checklist for future development projects is included in the implementation program.

As part of the CAP, the City developed a CAP consistency checklist for land use projects. The checklist is a streamlined tool that identifies the CAP's mandatory requirements and provides an opportunity for project applicants to demonstrate project's consistency with GHG reduction measures and actions in the CAP. The checklist is also an opportunity to identify additional project characteristics that support the GHG reduction targets and programs in the CAP.

City of San Mateo General Plan

Applicable General Plan policies related to greenhouse gas include, but are not limited to, the following listed below.

Policies	Description
C.OS 3.2	Regulate the location, density, and design of development throughout the City in order to preserve topographic forms and to minimize adverse impacts on vegetation, water, and wildlife resources.
UD 2.14	Require new development and building alterations to conform with the City's Sustainable Initiative Plan and subsequent Council adopted goals, policies, and standards pertaining to sustainable building construction.
BE-3	Adopt a green building policy for the design and construction of new civic facilities to meet or exceed LEED Silver green building standards and for building removal projects to meet or exceed LEED Certified. For some civic buildings, the GreenPoint Rated program may be applicable; in that case, buildings may be designed and constructed to meet or exceed a GreenPoint Rating of 75 points for new construction and 50 points for remodels in place of a LEED rating.
LU 8.3	Evaluate the City's GHG Emissions Reduction target, quantify greenhouse gas emissions in accordance with industry protocol, re-evaluate emission reduction measures, monitor the Greenhouse Gas Emissions Reduction Program's progress toward achieving the target GHG emissions reductions on an annual basis and require necessary amendments no less than every five years to respond to the current environmental setting, regulatory structure, and progress towards implementation.
LU 8.5	Promote or join local partnerships and opportunities that offer renewable energy options to the residents and/or help inform them of rebates and options while ensuring that the permit process is quick and inexpensive.

4.7.1.2 *Existing Conditions*

The project site is currently developed with office uses, and generate GHG emissions as shown in Table 4.7-2 below. Greenhouse gases are currently generated from automobile transport to and from the project site, and from the operation of the existing office buildings on the project site.

4.7.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,15
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1,2,15

4.7.2.1 *Greenhouse Gas Emissions (Checklist Question a)*

Thresholds of Significance

The GHG analysis conducted for the proposed project utilizes 2017 BAAQMD Significance Thresholds for impacts related to GHG emissions, in accordance with City policy. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, the air district recommends the disclosure of construction-generated GHG emissions nonetheless. For operational impacts, the BAAQMD project-level threshold of significance is the generation of 1,100 metric tons of CO2e per year during operations (bright-line threshold), or the generation of 4.6 metric tons of CO2e per service population (employees + patrons + residents) per year during operations (efficiency-based threshold), or compliance with a qualified GHG Reduction Strategy. The assessment on which this discussion is based evaluated the proposed project for compliance with the City of San Mateo CAP, in addition to the BAAQMD bright-line threshold of 1,100 metric tons of CO2e per year during operations.

Construction

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). GHG emissions would also be generated during demolition of the existing 164,709 square foot office park. Table 4.7-1 below illustrates the specific construction generated GHG emissions that would result from construction of the Project.

Table 4.7-1: Construction-Related Greenhouse Gas Emissions

Source Category	CO2e (Metric Tons/ Year)
First Year Construction (2019 – includes demolition)	683
Second Year Construction (2020)	1,073
Total:	**1,756**

Notes: Building construction, paving, and architectural coating assumed to occur simultaneously.

Source: CalEEMod version 2016.3.2. Refer to Appendix E for Model Data Outputs.

As shown in Table 4.7-1, project construction (including demolition activities) would result in the generation of approximately 1,756 metric tons of CO2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. GHG emissions generated by the construction sector have been declining in recent years. For instance, construction equipment engine efficiency has continued to improve year after year. On May 11, 2004, the EPA signed the final rule introducing Tier 4 emission standards, which are currently phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of nitrogen oxide be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

In addition, the California Energy Commission recently adopted changes to the 2016 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code). For instance, effective January 1, 2017, owners/builder of construction projects have been required to divert (recycle) 65 percent of generated construction waste materials generated during the project. This requirement greatly reduces the generation of GHG emissions by reducing decomposition at landfills, which is a source of CH4, and reducing demand for natural resources. **(Less than Significant Impact)**

Operational

Operation of the project would result in GHG emissions predominantly associated with motor vehicle use. Projected GHG emissions associated with proposed operations are quantified and compared to the existing baseline, which as previously stated includes a 164,709 square foot office park. Table 4.7-2 below summarizes all the direct and indirect annual GHG emissions level associated with the project.

Table 4.7-2: Operational-Related Greenhouse Gas Emissions (in MT CO2e)	
Source Category	**CO2e (Metric Tons/ Year)**
Proposed Project	
Area Source (landscaping, hearth)	18
Energy Consumption	817
Mobile	1,783
Solid Waste Generation	54
Water Usage	44
Total	2,716
Existing	
Area Source (landscaping, hearth)	0
Energy Consumption	793
Mobile	2,156
Solid Waste Generation	77
Water Usage	104
Total	3,131
Difference	
Area Source (landscaping, hearth)	+18
Energy Consumption	+24
Mobile	-373
Solid Waste Generation	-23
Water Usage	-60
Total	**-415**

Notes: Emissions projections account for a trip generation rate identified by Hexagon Transportation Consultants 2018. Project emissions account for adherence to the 2016 California Title 24 Building Energy Efficiency Standards and a 3-kilowatt solar system; Existing Baseline emissions do not.

Source: CalEEMod version 2016.3.2. Refer to Appendix E for Model Data Outputs.

As shown in Table 4.7-2, the decrease in operational GHG emissions over the existing baseline would be 415 metric tons of CO2e per year. Therefore, the proposed project would not surpass the BAAQMD bright-line numeric significance threshold of 1,100 metric tons of CO2e annually. Indeed, the Project would decrease the amount of GHG currently generated under existing conditions. Such a reduction will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions under AB 32 and SB 32. **(Less Than Significant Impact)**

4.7.2.2 *Consistency with Plans (Checklist Question b)*

Climate Action Plan

The San Mateo CAP is a strategic planning document that identifies sources of GHG emissions within the city's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic programs, policies, and projects to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The GHG reduction programs, policies, projects, and strategies are referred to as "reduction measures" in the CAP.

The City's CAP meets BAAQMD guidelines as follows:

- The CAP quantifies citywide GHG emissions, both existing and projected over the specified time period, resulting from activities in San Mateo as defined by the City's General Plan.
- The CAP establishes a level, based on substantial evidence, below which the contribution of emissions from activities covered by the plan would not be cumulatively considerable.
- CAP policy provisions reduce emissions to 15 percent below 2005 levels by 2020.
- CAP policy provisions reduce emissions to 35 percent below 2005 levels by 2030.
- CAP policy provisions provide a foundation for the City to reach the goal of reducing emissions to 80 percent below 1990 levels by 2050.
- The CAP identifies and analyzes the emissions resulting from specific actions or categories of actions anticipated within the city.
- The CAP specifies measures or a group of measures, including performance standards.
- The CAP establishes a mechanism to monitor its progress toward achieving the level and to require amendment if the plan is not achieving specific levels.

The reduction measures proposed in the CAP build on inventory results and key opportunities prioritized by City staff, members of the San Mateo Sustainability Commission, and members of the public. The CAP strategies consist of measures and actions that identify the steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the CAP respond to the needs of development, avoiding unnecessary regulation, streamlining new development, and achieving more efficient use of resources.

Both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated densities defined in the City's General Plan (2010). As previously described, the project proposes a General Plan Amendment from the site's existing designation of *Executive Office*, to *Medium Density Multi-Family*; as well as a Zoning Reclassification from *E1* to *R-3*. Despite this proposed change in the project site's land use designation, the project is consistent with the GHG inventory and forecast in the CAP. This is because the proposed project would generate less GHG emissions than currently generated onsite (see Table 4.7-2 above). The primary reason for this reduction in GHG emissions with implementation of the proposed project is the projected reduction of automobile trips compared with the existing condition. According to the traffic analysis prepared for the project, the project would result in 160 less automobile trips daily.

In addition, a specific project proposal is considered consistent with the San Mateo CAP if it complies with the "required" GHG reduction measures in the adopted CAP. The required GHG reduction measures applicable to the proposed project include the following:

- *Reduction Measure RE 3: Renewable energy systems for new residential buildings*. Section 23.24.030 of the San Mateo Municipal Code requires new single- and multi-family residential projects containing 17 or more units to provide a minimum of a 3-kilowatt photovoltaic system. The project is proposing 250 square feet of roof-top solar panels per each single-family unit for a total of 7,000 square feet of solar panels.
- *Reduction Measure AF 2: Provide pre-wiring for EV charging stations inside all garages*. The project will be required to provide pre-wiring in all project garages for EV charging stations. The encouragement of electric vehicles and clean air vehicles through the provision of charging facilities could lead to reduced use of gasoline-burning automobiles and thus, less GHG emissions.
- *Reduction Measure AT 2: Implement transportation demand management strategies to comply with the appropriate trip reduction target identified by the City of San Mateo.* Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, and air pollutants, including GHG emissions. The purpose of TDM is to promote more efficient utilization of existing transportation facilities, and to ensure that new developments are designed to maximize the potential for sustainable transportation usage. A TDM Plan has been prepared for the proposed project. The project TDM Plan includes trip reduction strategies with the goal of reducing overall vehicular trip making activity in the project area, and it is expected that the project would meet its trip reduction target of 10 percent reduction from residential ITE rates. The traffic analysis prepared for the project indicates that the proposed change in land use from the existing office use to residential would reduce average daily vehicle trips to and from the project site by approximately 160 trips. The site is a stop on multiple, free SamTrans routes and is also served by a free a shuttle service that connects to both the Hayward Park and Hillsdale Caltrain stations located on the west side of Highway 101. The project is located within walking distance (0.3 mile), and connected with pedestrian sidewalks, to restaurants, retail stores, and other services on South Norfolk Street. These services are conveniently located for future residents of the proposed project to access via walking, which will reduce the number of vehicle trips resulting in corresponding reductions in transportation-related GHG emissions.
- *Reduction Measure SW 1: Provide an area of sufficient space to store and allow access to a compost bin and/or participate in a composting program.* The project is proposing composting/mulching bins on-site. Furthermore, the project is proposing to participate in a composting program with the Recology integrated resource recovery company.

All development in San Mateo, including City projects are required to adhere to all City-adopted policy provisions, including those contained in the adopted CAP. The City has completed a checklist to confirm consistency with the CAP (see Appendix E). For the reasons stated above, the proposed project would not conflict with the City's CAP for the purpose of reducing GHG emissions. **(Less Than Significant Impact)**

Bay Area Air Quality Management Plan 2017 Clean Air Plan

The 2017 Clean Air Plan includes a diverse range of control measures designed to decrease GHG emissions. Consistency of the proposed project with 2017 Clean Air Plan is demonstrated by

assessing whether the project supports all of the project-applicable Clean Air Plan control measures for GHG emissions. The control strategies of the Clean Air Plan include Stationary Source Measures, Mobile Source Measures, and Transportation Control Measures. The 2017 Clean Air Plan also identifies two additional subcategories of control measures, which are Land Use and Local Impact Measures, which address the exposure of sensitive receptors to toxic air contaminants and is thereby not applicable to this impact discussion of GHG emissions, and Energy and Climate Measures, which address GHG emissions.

Stationary Source Measures in the Clean Air Plan such as those implemented to control emissions from metal melting facilities, cement kilns, refineries, and glass furnaces are not applicable to the proposed project. Therefore, consistency with the Clean Air Plan Stationary Source Measures is not evaluated further.

Transportation and Mobile Source Control Measures

The BAAQMD identifies transportation and mobile source control measures as part of the Clean Air Plan to reduce ozone precursor emissions from these sources. The transportation control measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and vehicle miles traveled (VMT) in addition to vehicle idling and traffic congestion. The proposed project is consistent with the Clean Air Plan's transportation and mobile source control measures in that it is the redevelopment of an existing urban environment. The Project is considered 'infill development' as it proposes to redevelop a built-out property and enhance the physical design of the urban environment. These aspects of the Project would result in the generation of a reduced amount of air pollutants. According to the EPA, redevelopments produce 32 to 57 percent less air pollutant emissions per capita relative to conventional developments; this is because the number of daily vehicle trips and daily VMT associated with redevelopments tend to be lower compared with development on vacant land (EPA 2011).

The proposed project would provide a convenient proximity to transit options and retail uses for its residents. For instance, the project site is a stop on multiple, free SamTrans routes and is also served by a free a shuttle service that connects to both the Hayward Park and Hillsdale Caltrain stations located on the west side of Highway 101. The Project is located within walking distance (0.3 mile), and connected with pedestrian sidewalks, to restaurants, retail stores, and other services on South Norfolk Street. The Project would also provide 285 bicycle parking spaces to encourage utilization of alternative modes of transportation. The increased transit accessibility would reduce vehicle trips and VMT versus the statewide average and encourage walking and non-automotive forms of transportation and would result in corresponding reductions in transportation-related GHG emissions.

As a result, the proposed Project would not conflict with the identified transportation and mobile source control measures of the Clean Air Plan.

Energy and Climate Control Measures

The Clean Air Plan also includes Energy and Climate Control Measures, which are designed to reduce GHG emissions. Implementation of these measures is intended to promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the "urban heat island" effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-VOC-emitting) trees to reduce biogenic emissions,

lower air temperatures, provide shade, and absorb air pollutants. The measures, as stated below, include voluntary approaches to reduce the heat island effect by increasing shading in urban and suburban areas through the planting of trees.

- The proposed project would include more than 280 trees, which would help reduce the heating effect.
- In addition, the proposed project proposes the installation of at least a three-kilowatt solar energy generation system in compliance with the San Mateo Municipal Code.
- Furthermore, the proposed building would be built to 2016 Title 24 Building Energy Efficiency Standards. Energy-efficient buildings require less electricity, and increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Therefore, the proposed Project would not conflict with the BAAQMD Energy and Climate Control Measures.

For these reasons, the proposed Project would conform to the project-applicable control measures in the Clean Air Plan. **(Less Than Significant Impact)**

Association of Bay Area Governments Final Plan Bay Area 2040

ABAG's Plan Bay Area is the RTP/SCS for the San Francisco Bay Area. Plan Bay Area establishes GHG emissions goals for automobiles and light-duty trucks, a potent source of GHG emissions attributable to land use development. As previously described, ABAG was tasked by CARB to achieve a seven percent per capita reduction in mobile-source GHG emissions compared to 2005 vehicle emissions by 2020 and a 15 percent per capita reduction by 2035. Plan Bay Area 2013-2040 establishes an overall mechanism to achieve these GHG targets for the project region consistent with both the target date of AB 32 (2020) and the post-2020 GHG reduction goals of SB 32. CARB has confirmed the project region will achieve its GHG reduction targets by implementing Plan Bay Area (CARB 2014).

The RTP/SCS identifies 200 "Priority Development Areas" which are areas focused for growth and development. Priority Development Areas are defined by the RTP/SCS as existing neighborhoods that are served by public transit and have been identified as appropriate for additional, compact development. The project site is located in an area identified as an Urbanized Area in the RTP/SCS. Since the project site is an Urbanized Area in the RTP/SCS planning period as opposed to "Priority Conservation Area," it is included in an area where infill redevelopment, such as proposed by the project, is both predicted and encouraged by ABAG (ABAG 2017, Map 4.5). Furthermore, the project is a modernization of land uses within a built environment (infill development), resulting in an increase of land use densification on the project site. The project would increase density in the vicinity over current conditions. Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies such as enhanced transit services. The project would increase the site density to 17.1 dwelling units per acre.

For these reasons, the project is consistent with Plan Bay Area and it can be assumed that regional mobile emissions will decrease in line with the goals of Plan Bay Area with implementation of the proposed project. Implementing ABAG's RTP/SCS will greatly reduce the regional GHG emissions

from transportation, and the proposed project will not obstruct the achievement of Plan Bay Area's emission reduction targets. **(Less Than Significant Impact)**

4.7.3 Conclusion

Construction and operational activities would have a less than significant GHG emissions impact. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Phase I Environmental Site Assessment (ESA) prepared by *EBI Consulting* in March 2017 and Asbestos Operations and Maintenance Plan prepared by *EBI Consulting* in May 2017. The following discussion is also based in part on a Phase II Environmental Site Assessment Report prepared by *Langan Engineering and Environmental Services, Inc.* in March 2018. Copies of these reports are provided in Appendix E.

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

Federal and State

Hazardous Materials Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies including the City of San Mateo Fire Department have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Cortese List (Government Code Section 65962.5)

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by the state, local agencies, and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and CalRecycle.

Asbestos-Containing Material and Lead Paint Regulations

Friable asbestos is any asbestos containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite siding made with

cement. Use of friable asbestos products was banned in 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodel that may disturb the ACMs.

The U.S. Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Local

City of San Mateo Emergency Operations Plan

The City of San Mateo has prepared an Emergency Operations Plan to ensure the most efficient use of resources to protect the community and its property before, during, and after a natural, technological, or man-made emergency. This plan confirms the City's emergency organization, assigns tasks, presents policies and general procedures, and coordinates planning within various emergency management functions utilizing the Standardized Emergency Management System (SEMS) in alignment with the National Incident Management System. The objective of this plan is to integrate and coordinate all San Mateo facilities and personnel into an effective team that can prevent, protect, respond to, and recover from emergencies. The emergency operations plan is an extension of the State Emergency Plan and the San Mateo County Operational Area Plan.

City of San Mateo General Plan

Applicable General Plan policies related to hazardous materials include, but are not limited to, the following listed below.

Policies	Description
LU 4.33	Manage toxic and hazardous wastes by following the goals an policies contained in the Safety Element
S 4.1	Maintain the City's emergency readiness and response capabilities.
S 5.2	Adopt by reference all goals, policies, implementation measures, and supporting data contained in the San Mateo County Hazardous Waste Management Plan
S 5.3	Promote on-site treatment of hazardous wastes by waste generators to minimize the use of hazardous materials and the transfer of waste for off-site treatment.
S 5.4	Restrict the transportation of hazardous materials and waste to truck routes designated to Circulation Policy C-1.3, and limit such transportation to non-commute hours.
S 5.5	Regulate the location and operation of hazardous waste management facilities through the issuance of a special use permit.
S 5.6	Restrict the possible location of new hazardous waste management facilities to those areas designated on Figure S-5 of the General Plan. Prohibit the location of residual repository and incineration facilities in the City of San Mateo due to proximity to residential uses. Consider allowing waste treatment, transfer and storage facilities in service commercial districts. The location of waste management facilities in the City should be based on the ratings of area suitability contained in Appendix Q of the General Plan.

City of San Mateo Fire Code

The City Municipal Code has a Building and Construction Fire Code for all development and construction activities within the City of San Mateo. The Fire Code requires compliance with the California Fire Code and Uniform Fire Code and was adopted for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion.

4.8.1.2 *Existing Conditions*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Due to the fact that these substances have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Other programs set forth remediation requirements at sites where contamination has occurred.

Hazardous waste generators and hazardous materials users in the City are required to comply with regulations enforced by several federal, state, and county agencies. The regulations are designed to reduce the risk associated with the human exposure to hazardous materials and minimize adverse environmental effects. State and federal construction worker health and safety regulations require protective measures during construction activities where workers may be exposed to asbestos, lead, and/or other hazardous materials.

Site History

Based on a review of historic aerial photographs, the project site was reclaimed from tidal marshland in late 1930s. The site was dewatered and filled sometime prior to 1939. The drainage channel along the north of the site, currently named Borel Creek, was constructed in the late 1940s. Highway 101 also appears to be constructed at the same time. In the late 1950's, an electrical substation was found to the northwest of the site. In the 1970's, Highway 101 was expanded into a multilane highway. The current homes also appear to the northeast and southeast of the project site at this time. Since developed circa 1979 – 1981, the project site has operated as an office complex with three underground storage tanks (USTs) formerly operated by previous tenants that were all removed by 2004 under regulatory oversight and with case closure/no further action status for all three USTs. Prior to development, the site was undeveloped with a portion being a waterway that lead to the Seal

Slough connected to the San Francisco Bay. The office buildings to the west appear to be constructed in the 1980's.

Environmental Conditions

The project site is located at an elevation of approximately eight feet above mean sea level (msl). The project area exhibits a general flat topography with an overall gentle downslope to the northeast. The project site includes two contiguous parcels totaling 11.1 acres improved with three office buildings developed in 1979. The two-story office buildings total 164,709 square feet and do not include basements. Other improvements include a pond, water fountain and mature landscaping at the center and perimeter of the site and paved surface parking on all four sides of the site. There are currently no manufacturing or industrial operations conducted at the project site.

The site is underlain by up to 4.5 feet of sand or sand with clay and/or gravel fill and clay with debris to a depth of up to 6 feet. This fill material is underlain by very soft clay characterized as Bay Mud and extending to an observed 20 feet bgs.

Potential On-site Sources of Contamination

Based on a March 2017 site reconnaissance, approximately one dozen containers, mostly unlabeled, up to 5-gallons each were identified within an exterior municipal waste enclosure on the site. The open containers appeared to contain rainwater. Other containers appeared to be paint. Stains and leakage were not apparent. The containers were likely associated with general building maintenance and are not considered to represent a 'recognized environmental condition' (REC) to the project site but should be removed as a function of routine property maintenance. Various small quantities of maintenance supplies and water conditioning agents for the fountain were identified in the maintenance shop but they did not appear to present a concern.

Lightly oil-stained areas of less than two square feet each were identified at the base of the elevator equipment in Buildings one and two. The staining did not appear to be due to any active leak and according to property management, this may be the result of minor spillage of hydraulic fluid when the elevators were serviced. The presence of minimal staining in the elevator equipment rooms was not considered to represent a REC and was considered a *de minimis condition*. No further action is recommended at this time.

The project site was not identified on the EnviroStor database. However, four sites located within 1.0 mile of the site were identified on the EnviroStor database, however, they are unlikely to represent an environmental concern to the project site based on their crossgradient location of at least 0.22 mile from the project site.

Off-Site Sources of Contamination

One nearby property was listed in the leaking underground storage tank (LUST) database including Bayside Building Materials at 2075 S. Norfolk Street is located 0.07 mile northeast of the site. One gasoline UST was removed in 2005 and limited soil contamination was identified. Groundwater contamination was identified that included total petroleum hydrocarbons as gasoline (TPHg) up to 905 parts per billion (ppb), benzene up to 6.3 ppb and methyl tertiary-butyl ether (MTBE) up to 124

ppb. Based on the relatively low levels of contamination identified, cross-gradient location and case closed status, this site does not represent an apparent environmental concern to the project site.

Soil and Groundwater Contamination

Three USTs were historically operated on the project site that were removed from 1987 to 2004. Releases were identified during the removal of the first two USTs and the project site was added to the Leaking Underground Storage Tank (LUST) List under the names of Pacific Bell and American President Systems, Inc.

Subsurface investigations were conducted in 1987 – 1993 with groundwater results reported to include Total Petroleum Hydrocarbons as Diesel (TPHd) from 0.053 to 0.24 parts per million (ppm) in all four groundwater wells in 1993. Case closure was issued for both LUST cases in 1989 and 1993 and six wells were destroyed under regulatory oversight in 1999. The last UST was removed in 2004 and TPHd up to 7.7 ppm was identified in all soil samples and at 120 parts per billion (ppb) in one groundwater sample. These levels were considered insignificant and a No Further Action letter for the tank removal was issued on May 8, 2007. Based on the case closed status and non-detect to low levels of contaminants detected in soil and groundwater samples, the former USTs and associated LUST cases are considered *historical recognized environmental conditions (HRECs*).

The Phase I ESA also identified elevated lead up to 4,050 ppm at a depth of two feet below ground surface (ft bgs) in three of 15 samples collected in the northeastern portion of the site. The elevated lead was attributed to a thin layer of fill material beneath the parking lot. The lead impacted soil was concluded to be in an isolated area.

Wildland Fires

According to San Mateo County Fire Hazard Safety Zone maps produced by CAL FIRE, the project site is not located in a fire hazard severity zone in a State Responsibility Area (SRA) or a Local Responsibility Area (LRA). This indicates a very low potential for wildland fires to impact the proposed project.

4.8.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	1,2
b) 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?	☐	☒	☐	☐	1,2,16,17 ,18

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1,2
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☒	☐	1,2,16
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, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2
f) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2,3
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1,2,3
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	1,2

4.8.2.1 *Hazardous Materials Use by Proposed Uses (Checklist Question a)*

The proposed residential development would not involve the transport, use, storage or disposal of reportable quantities of hazardous materials. Residents would likely use and store small quantities of cleaning supplies and maintenance chemicals which would not be considered significant. During construction, the project may store fuels and chemicals used in the construction of the proposed buildings. It is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similarly related materials would be brought onto the project site, used, and stored during the construction period. Temporary use of fuels and other chemicals associated with construction on the site and use of small quantities of hazardous materials during future operations would not result in a significant hazard to the public or environment. **(Less than Significant Impact)**

4.8.2.2 *On-Site Hazardous Materials Impacts (Checklist Question b and d)*

Underground Storage Tank Removals

As stated in *Section 4.8.1.1*, there have historically been three USTs located beneath the site. By 2004, all the gasoline tanks were removed. The Phase I ESA concluded that the UST listings do not present an environmental concern based on the closed case status and non-detect to low levels of contaminants detected in soil and groundwater samples. The former USTs are considered *HRECs*. Phase II sampling was conducted to collect additional analytical data prior to development to facilitate offsite disposal as-needed, and evaluate residual petroleum hydrocarbon impacts, if any, in the vicinity of former USTs. Two borings for soil and groundwater sampling were made in the vicinity of the former USTs to evaluate residual petroleum hydrocarbon impacts. In the UST samples, TPHg, PAHs/SVOCs, and VOCs were detected below the San Francisco Bay Regional Water Quality Control Board's Tier 1[7] Environmental Screening Level (ESLs) for residential land use.[8] Metals detected in UST samples were below their respective hazardous waste criteria and Tier 1 ESLs. Therefore, the soils near the former USTs is not considered a source of contamination and does not present a risk to construction workers, nearby residents, or the environment in general. Therefore, the impact would be less than significant. **(Less than Significant Impact)**

Lead-Impacted Soil

As stated in *Section 4.8.1.1*, the Phase I Environmental Site Assessment (ESA; EBI Consulting, Inc., 2017) identified elevated lead up to 4,050 parts per million (ppm) at a depth of two feet below ground surface (ft bgs) in three of 15 samples collected in the northeastern portion of the site. The elevated lead was attributed to a thin layer of fill material beneath the parking lot. A subsequent Phase II ESA (Langan, 2018) confirmed the presence of elevated lead concentrations (See Figure 2 and Table 2 of the Phase II ESA attached as Appendix F of this Initial Study). Eleven borings were advanced to 10 feet bgs to delineate the extent of lead-impacts in the northeastern corner of the site and confirmed the presence of elevated lead between 2 and 6.5 feet bgs based on field observations and laboratory analytical testing. Lead was detected in all samples analyzed at concentrations ranging from 2.4 ppm to 3,900 ppm. The sample results from the Phase II ESA (Langan, 2018) were compared to the Environmental Screening Level (ESL) for residential land use for lead established by the San Francisco Regional Water Quality Control Board (RWQCB), which is 80 ppm. The ESL for the construction worker exposure scenario for lead is 160 ppm. Lead is present above both the residential and construction worker ESLs.

Impact HAZ-1: The project could result in construction workers, future residents and occupants of the site, and nearby receptors being exposed to substantial risks and hazards related to soil and groundwater contamination at the site. **(Significant Impact)**

Mitigation Measures: The project includes the following measures to reduce the risk of hazardous materials release into the environment during building demolition:

[7] Low detections of other compounds in soil and groundwater, including petroleum hydrocarbons and metals, at or near Tier 1 ESLs are considered de minimis conditions not warranting further action.
[8] RWQCB ESL Summary Tables, dated Feb. 2016 (Rev. 3). Available online at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html.

MM HAZ-1: According to the Phase II Environmental Site Assessment (ESA; Langan, 2018) for the project, lead impacted debris located in the northeastern portion of the site must be properly managed to minimize potential risk. San Mateo County Groundwater Protection Program (GPP) will serve as lead oversight agency overseeing actions related to management of soil with elevated lead. The project would implement one of two possible scenarios to mitigate human contact with lead impacted soil prior to or concurrent with redevelopment:

- remove lead impacted soil from beneath the northeastern parcels planned for single-family homes and manage remaining impacted soil beneath future multi-unit buildings under a deed restriction and under an associated, GPP-approved Operation and Maintenance Plan (OMP), or
- remove all lead impacted soil to obtain unrestricted use approval with no deed restriction needed. A hardscape (i.e., asphalt pavement) or softscape (i.e., soil cover and permeable pavers from landscaping) cover will be required to remain above any lead-impacted soil remaining in place.

An Excavation Plan, or equivalent document, will be required under Scenarios one and two, to describe procedures for proper management and disposition of lead-impacted soil proposed for removal. Additionally, a Soil Management Plan, or equivalent document, will be required under Scenario one to ensure that engineering controls (i.e., hardscape and softscape) are maintained and that disturbance of lead-impacted soil left-in-place will result in proper handling and disposal of waste. **(Less than Significant Impact)**

The project would implement the following mitigation measure to ensure the impact is less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

The project is not located on a site which is included on a list of hazardous materials sites nor are there known or listed sites in the vicinity that contain chemicals that could affect the site or be released into the environment as a result of site construction activities, as discussed in *Section 4.8.1.1* above. **(Less Than Significant Impact)**

4.8.2.3 *Existing Structures, Demolition and Disposal (Checklist Question b)*

The project proposes to demolish the existing on-site buildings. Asbestos-containing materials (ACM), lead-based paint and other potentially hazardous building materials may be contained in structural elements. Use of lead in household paint was banned by the U.S. Environmental Protection Agency (EPA) effective January 1, 1978. Since the buildings at the project site were constructed in 1979, a lead-based paint survey was not warranted at the project site.

A limited visual screening survey was conducted for the presence of ACMs at the project site. A site inspection identified friable suspect ACM in the form of drywall/joint compound and ceiling panels and non-friable suspect ACM in the form of vinyl flooring and associated mastic, various construction mastics and caulking, and roofing materials during a limited visual screening survey for the site. The suspect ACM were generally observed to be undamaged and in good condition at the time of inspection. The suspect ACM in good condition do not currently pose a significant

environmental threat to the occupants of the project site. It should be noted that the limited visual screening survey conducted for this assessment does not constitute a full asbestos inspection, in which all areas of the buildings would have been thoroughly surveyed and sampled. Therefore, additional sampling, removal, and disposal arrangements may be necessary should building construction or renovation activities be conducted.

An Asbestos Operations and Maintenance (O&M) Plan for the project site was prepared in May 2017 for maintenance of suspect, assumed, or known ACM/asbestos-containing construction materials (ACCMs) in their existing condition. This Plan has been designed to minimize the risk of human exposure to asbestos fibers and asbestos fiber release during general work activities, scheduled maintenance and renovation of the building.

Other common items, such as electrical transformers, fluorescent lighting, electrical switches, heating/cooling equipment, and thermostats can contain hazardous materials, which may pose a risk if not properly handled and disposed. The project proposes to dispose of these materials in conformance with local, state and federal regulations and disposal would be carried out by trained workers.

Demolition and disposal of the existing buildings at the site, with the implementation of the standard measures below, will not result in significant impacts related to the presence of ACM or lead-based paint.

Conditions of Approval

The project proposes to dispose of these materials in conformance with local, state and federal regulations and disposal would be carried out by trained workers. Demolition and disposal of the existing buildings at the site, with the implementation of the standard measures below, will not result in significant impacts related to the presence of ACM or lead-based paint.

- As required by state law, an asbestos and lead paint abatement scope of work will be developed prior to issuance of a demolition permit for the structure on the project site. All measures outlined in this scope of work shall be implemented as part of the project. This scope of work shall outline the performance parameters for hazardous remediation standards and regulatory compliance criteria. In addition, any asbestos abatement contractors performing work on the site will be licensed by the State of California. Buildings of the age of those on the project site may contain mercury and/or PCBs. Therefore, these hazardous materials shall be found and removed prior to demolition and recycling. This will be verified as part of a final hazardous materials report prepared by a qualified consultant and will be submitted to the Building Division prior to issuance of a demolition permit.

With implementation of the standard measures listed above, the project would not result in significant impacts related to the presence of ACM or lead-based paint. (**Less Than Significant Impact)**

4.8.2.4 *Impacts to Nearby Schools (Checklist Question c)*

As discussed above in *Section 4.8.2.1* above, the proposed project is not anticipated to routinely transport and use hazardous materials. There are no schools located within one quarter mile of the Project site. The nearest school is Parkside Elementary School, approximately 0.7 mile north of the project site. Therefore, no impacts to schools would occur. **(No Impact)**

4.8.2.5 *Airport Hazards (Checklist Question e, f)*

The project site is approximately six miles southeast from the San Francisco International Airport and 3.2 miles northwest of San Carlos Airport. The City, including the project site, is not within the safety zones (or Comprehensive Land Use area) of either airport. [9] The project site is not within the vicinity of a private airstrip. These hazards would not present a significant impact to those living or working at the project site. **(No Impact)**

4.8.2.6 *Emergency Response Plans (Checklist Question g)*

Development of the proposed project would not physically interfere with an adopted emergency response or evacuation plan. Compliance with the California Building and Fire Code requirements as amended by the City of San Mateo would ensure that proposed project would not impair or interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. **(No Impact)**

4.8.2.7 *Wildland Fires (Checklist Question h)*

The project site is in a developed urban area and it is not adjacent to any wildland areas that would be susceptible to fire. Therefore, implementation of the proposed project would not expose future site users or the proposed building to wildland fires. **(No Impact)**

4.8.3 Conclusion

Construction of the proposed development, with the implementation of standard measures to reduce ACM and LBP exposure and mitigation measure HAZ-1 would reduce the impact of hazardous materials to a less than significant level. **(Less Than Significant Impact With Mitigation)**

[9] 1) City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. July 2012. Page IV-23. 2) City/County Association of Governments of San Mateo County. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Carlos Airport*. October 2015. Page 4-17.

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Federal, State, and Regional

Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the water quality control boards. The project site is within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan or "Basin Plan". The Basin Plan lists the beneficial uses that the RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit[10] (MRP) that covers the project area. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. The MRP requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural

[10] MRP Number CAS612008

hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRM) that identify Special Flood Hazard Areas (SFHA). An SFHA is an area that will be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.[11] Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. In accordance with the state Dam Safety Act, dams are inspected regularly and detailed evacuation procedures have been prepared for each dam.

Local

San Mateo Countywide Water Pollution Prevention Program

The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) was established in 1990 to reduce the pollution carried by stormwater into local creeks, San Francisco Bay, and the Pacific Ocean. The program is a partnership of the City/County Association of Governments (C/CAG), each incorporated city and town in the county, and the County of San Mateo, which share a common National Pollutant Discharge Elimination System permit. The SMCWPPP includes pollution reduction activities for construction sites, illegal discharges and illicit connections, new development, and municipal operations. The program also includes a target pollutant reduction strategy and monitoring program.

San Mateo General Plan

Applicable General Plan policies related to hydrology and water quality include, but are not limited to, the following listed below.

Policies	Description
S 2.5	Implement the improvements identified in the City of San Mateo's seven watershed areas to improve and maintain drainage capacity adequate to convey water during a typical storm event. Include consideration of creek maintenance and an education and/or enforcement program to minimize illegal dumping of debris and chemicals.

[11] State of California. 2013. *2013 State Hazards Mitigation Plan*. Accessed April 23, 2018. http://hazardmitigation.calema.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp.

Policies	Description
LU 4.4.5	Continue to implement the San Mateo Countywide Stormwater Pollution Prevention Program to ensure compliance with the National Pollutant Discharge Elimination (NPDES) permit. 1. Prevent water pollution from point and non-point sources. 2. Minimize stormwater runoff and pollution by encouraging low-impact design features, such as pervious parking surfaces, bioswales and filter strips in new development. 3. Encourage the use of drought-tolerant and native vegetation in landscaping.

San Mateo Municipal Code

Municipal Code Title 7, Chapter 39, Stormwater Management and Discharge Control, addresses stormwater management and controlling non-stormwater discharge in the City. It includes requirement for a Stormwater Pollution Prevention Program (STOPPP) construction permit. This permit regulates the discharge into the City's stormwater system and is in coordination with the MRP above.

4.9.1.2 *Existing Conditions*

Hydrology and Drainage

There are a total of four major drainage basins (both artificial and natural) within the City, including the San Mateo Creek complex, the North San Mateo complex, the Marina Lagoon complex, and the Third and Detroit watershed, each composed of numerous stream channels, culverts, and storm drainage piping systems. The Marina Lagoon complex is further divided into four minor drainage basins, including the 16th Avenue Drain, 19th Avenue Drain, Laurel Creek, and Direct Drainage to Marina Lagoon. The project site is located within the 19th Avenue Watershed. Stormwater onsite typically flows into the City's 12-inch and 8-inch storm drains under Borel Creek, both of which drain to the Seal Slough, and runoff is then pumped into the Bay.

Flooding Hazards

The City of San Mateo Fire Department and Public Works Department and the Department of Emergency Services monitor low-lying areas and stormwater runoff. The San Mateo Fire Department is responsible for monitoring and responding to imminent/actual flooding. The City of San Mateo confronts substantial flood risks from the San Francisco Bay. According to the Flood Insurance Rate Map (FIRM) prepared by Federal Emergency Management Agency (FEMA) for the project area, the site is located within Zone X (area with reduced flood risk due to levee).[12]

Surface Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as non-point source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris, pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain. The

[12] Federal Emergency Management Agency. *Flood Insurance Rate Map, Community Panel No. 06081C0166F*. July 16, 2015.

nearest waterways to the project site are Borel Creek adjacent and north of the project site, and Seal Slough approximately 500 feet east. The San Francisco Bay is approximately 1.3 miles northeast of the site.

Groundwater

As discussed in *Section 4.6 Geology and Soils*, test borings encountered groundwater at depths ranging from one to seven feet below the ground surface. Fluctuations in groundwater may occur due to variations in rainfall, underground drainage patterns, and other factors. The project site is not located within a natural or facility groundwater recharge area.

Seiche, Tsunami, and Mudflows

A seiche is defined as a standing wave generated by rapid displacement of water within an enclosed body of water (such as a reservoir, lake, or bay) due to an earthquake that triggers land movement within the body or landsliding into or beneath the water body.[13]

Tsunamis are seismically generated sea waves. In the City, tsunami and seiche events are most hazardous in shoreline areas. The project site is approximately 1.3 miles from the San Francisco Bay, and is not in a tsunami or seiche inundation area.[14]

Dam failure

There is a total of six dams that affect the City in regard to potential flooding. These dams include Crystal Springs, San Andreas, Laurel Creek and East Laurel Creek, and Tobin Creek in Hillsborough. Lower Crystal Springs Dam is the largest of the dams that would affect the City in event of failure. This dam maintains the majority of the water in the Crystal Springs reservoir, which retains a water supply for San Francisco, and most cities within San Mateo County, including the City of San Mateo. The California Division of Safety of Dams (DSOD) reviews and inspects the dams for potential failure due to a major seismic event. According to the most recent reports for each of the dams under the jurisdiction of DSOD (Lower Crystal Springs, San Andreas, Laurel Creek), the DSOD indicates that the dams are structurally safe and will perform without failure. The Lower Crystal Springs Dam specifically has been evaluated for the potential of an earthquake with a maximum magnitude of 8.3 and determined that the potential for dam failure would be low. According to the City's General Plan EIR, the project site is within the area of potential inundation area due to Crystal Springs Dam failure.[15]

[13] U.S. Geological Survey. "Seismic Seiches." Accessed August 10, 2018. Available at: https://earthquake.usgs.gov/learn/topics/seiche.php.
[14] Association of Bay Area Governments. "Resilience Program." Accessed August 10, 2018. Available at: http://gis.abag.ca.gov/website/Hazards/?hlyr=tsunami.
[15] City of San Mateo. *City of San Mateo General Plan EIR*. January 2010. Figure 4.8-4.

4.9.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1,2,3,4
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1,2,3
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐	1,2,3,4
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on-or off-site?	☐	☐	☒	☐	1,2,3,4
e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1,2,3,4
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐	1,2,3,4
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1,2,3
h) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	1,2,3
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐	1,2,3
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1,2,3

4.9.2.1 *Water Quality Impacts (Checklist Questions a, f)*

During Construction

Implementation of the project would require demolition, excavation, grading, and construction of the site. Construction activities would temporarily increase the amount of unconsolidated materials on-site, and grading activities could increase erosion and sedimentation that could be carried by runoff into natural waterways, which could increase sedimentation impacts to local creeks or San Francisco Bay.

The proposed project would result in the disturbance of an 11.1-acre project site. The project would disturb more than one acre of ground surface, and therefore is subject to compliance with the Construction General Permit. In compliance with the permit, the project is required to develop and implement a SWPPP/STOPPP construction permit. Implementation of the following conditions of approval would reduce the project's construction phase stormwater pollution impacts to less than significant levels.

Conditions of Approval

The following conditions, based on RWQCB requirements and City of San Mateo Standard Conditions of Approval, shall be implemented by the project in order to reduce potential construction-related water quality impacts:

- Construction BMPs shall be implemented for reducing the volume of runoff and pollution in runoff to the maximum extent practicable during site excavation, grading, and construction. In accordance with the City's standards, these BMPs will include, but will not be limited to:

    - Avoid or minimize excavation and grading activities during wet weather, unless the City approves a winter erosion control plan submitted by the applicant.
    - Use effective, site-specific erosion and sediment control methods during the construction periods. Provide temporary cover of all disturbed surfaces to help control erosion during construction.
    - Provide permanent cover as soon as is practical to stabilize the disturbed surfaces after construction has been completed.
    - Protect existing storm drain inlets in the project area from sedimentation with filter fabric fences gravel bags block and gravel filters.
    - Cover and stabilize stockpiled soil and materials with tarps, geotextile fabric, hydroseeding and/or erosion control blankets.
    - Install berms or silt fencing around stockpiled materials to prevent stormwater runoff from transporting sediment off-site.

- The applicant shall obtain a Stormwater Pollution Prevention Program (STOPPP) Construction permit, paying the required fees and posting the required cash deposit, for all work associated with the stormwater pollution prevention program (San Mateo Municipal Code Section 7.39). The fee amount will be based upon the City Council resolution in effect at the time the building permit application is made. The permit shall be issued prior to issuance of the first building permit.

- In accordance with the City's Municipal Code (SMMC 7.38.150), the Director of Public Works may approve the discharge of ground waters to the sanitary sewer if the source is deemed unacceptable by State and Federal authorities for discharge to surface waters of the United States, whether pretreated or untreated, and for which no reasonable alternative method of disposal is available. Following the verification of the applicable local, state and/or federal approvals, a Discharge Plan will be approved and monitored by the Public Works Department.

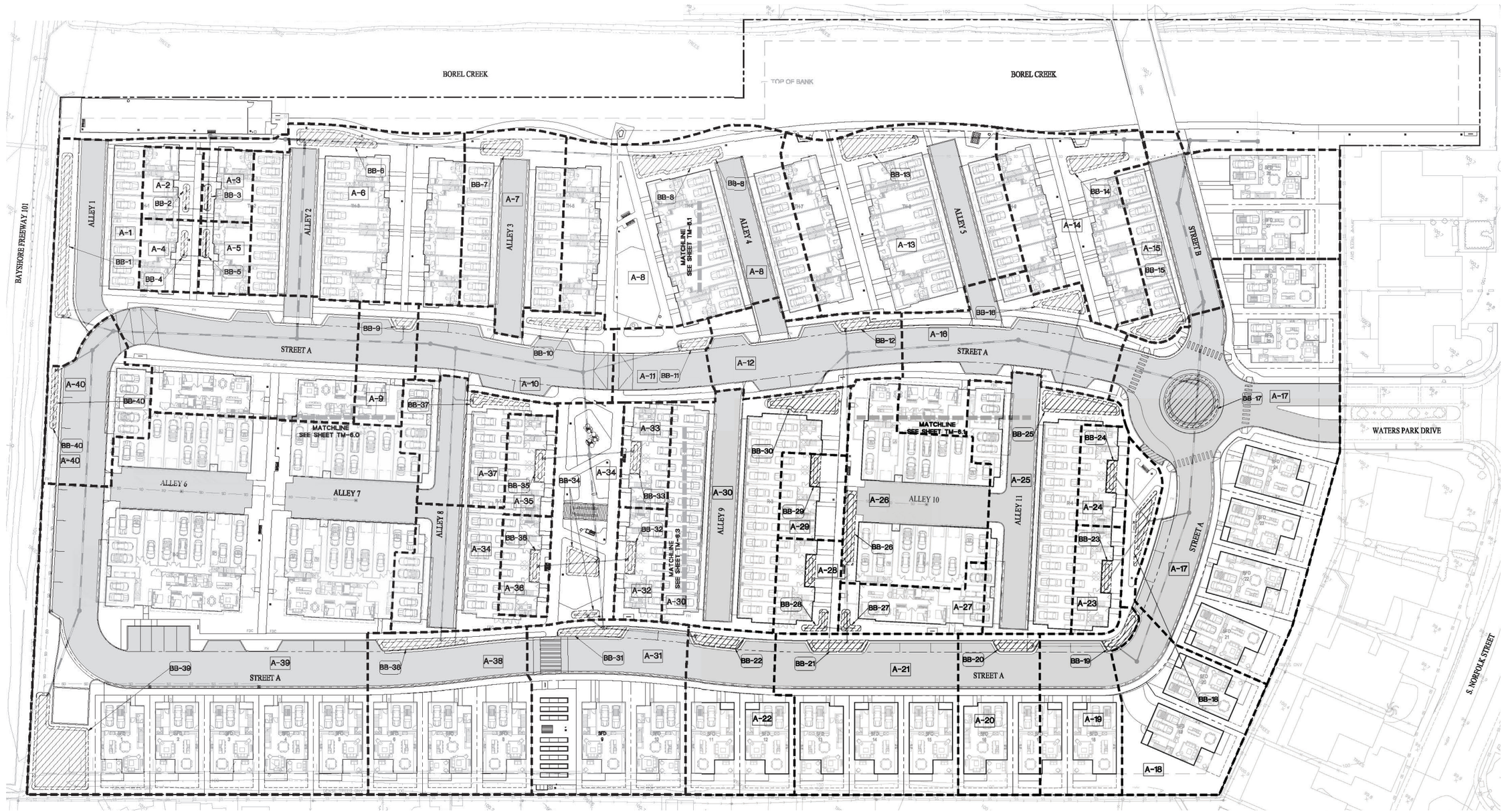
Construction of the proposed project, with implementation of the above measures in accordance with the City's Municipal Code and General Plan policies, would not result in significant construction-related water quality impacts. **(Less than Significant Impact)**

Post-Construction

Stormwater from urban uses typically contains sediment, metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. Runoff from the project site after the proposed project is constructed may contain sediment, metals and other pollutants from roof materials, and chemicals (i.e., fertilizers, pesticides, etc.) from the landscaped areas. In addition, runoff from the paved surfaces onsite may contain sediment and trash. Paved surfaces for the proposed residential development may also contain oil, grease, and metals from the vehicles. Figure 4.9-1 provides the preliminary stormwater control plan for the project, depicting the existing and proposed storm drain infrastructure, including the proposed treatment control measures.
The Stormwater Management Plan (SWMP) (as seen in figure 4.9-1, shall be completed for the project in accordance with the SMCPPP's C.3 Stormwater Technical Guidelines to help reduce discharge of pollutants into waterways and protect local water quality.

As further discussed in *Section 4.9.2.3*, since the amount of impervious area created with the project would be greater than 10,000 square feet, the project is subject to compliance with the MRP.

The proposed project, when completed, would not significantly increase the amount of runoff or pollutants flowing into the storm drain system, following the implementation of appropriate stormwater treatment measures. Construction and excavation activities could, however, temporarily increase pollutant loads.



PRELIMINARY STORMWATER CONTROL PLAN | FIGURE 4.9-1

Conditions of Approval

The following conditions of approval, based on RWQCB requirements and City of San Mateo Standard Conditions of Approval, shall be implemented by the project in order to reduce potential post-construction water quality impacts:

- The project shall comply with all City of San Mateo's ordinances, policies, and processes regarding the post-construction treatment of stormwater runoff. Specifically, a Stormwater Management Plan (SWMP) will be developed prior to issuance of grading or building permits for project construction, to ensure compliance with City of San Mateo and MRP requirements. The SWMP will meet the criteria for stormwater protection outlined in the San Mateo Countywide Water Pollution Prevention Program *C.3 Stormwater Technical Guidance.*

The project will implement site design and source control BMPs for minimizing the volume of runoff and pollution in runoff to the extent practicable, per the MRP. These BMPs may include the following:

- Disconnect downspouts that are directed into landscape areas;
- Minimize impervious surfaces and increase use of permeable pavement where feasible;
- Locate all storm drain inlets to be stenciled with, "No Dumping! Flows to Bay" to discourage illegal dumping;
- Locate and design trash enclosures and materials handling areas in covered areas
- Use effective, site-specific erosion and sediment control methods during post-construction periods.

By implementing standard measures and complying with the requirements of the MRP, the proposed project would have a less than significant impact on post-construction water quality. **(Less than Significant Impact)**

4.9.2.2 *Groundwater Impacts (Checklist Question b, f)*

The project site is located in a developed urban area and is not within a designated groundwater recharge zone for the groundwater basin. There were six wells on the project site that were removed under regulatory oversight in 1999. Based on the case closed status and non-detect to low levels of contaminants detected in soil and groundwater samples, the former USTs and associated LUST cases are considered historical recognized environmental conditions (HRECs).

The depth to groundwater on the project site was measured at depths of one to seven feet below grade. Groundwater depths at the project site are subject to tidal influence.

The proposed residential units would not include below ground levels; however, construction of the project would require excavation of existing fill and installation of utility trenches. These activities, when completed below an elevation of one foot, may require temporary dewatering during construction to keep working areas dry. Dewatering would be accomplished by pumping from sumps and will be required to follow the measures (MM HYD-1) as stated below to protect groundwater quality of the shallow aquifer underlying the site.

Impact HYD-1: Extended dewatering of utility trench excavations may cause settlement of newly installed pipelines and adjacent improvements. **(Significant Impact)**

Mitigation Measure: The following mitigation measures will be implemented during construction to reduce impacts of extended dewatering.

MM HYD-1: Utility trenches shall be installed with low permeability cutoffs to reduce the risk of inadvertent groundwater flow along permeable bedding or backfill. Placement of the low permeability cutoffs will be determined when utility plans are finalized.

The proposed project, with implementation of the above mitigation measure, would reduce impacts of dewatering to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.9.2.3 *Storm Drainage System Impacts (Checklist Questions c, d, e)*

The project site is currently developed with a commercial office park, including 310,816 square feet of impervious surfaces and 173,663 square feet of pervious surfaces. The proposed project would increase the impervious surfaces onsite to 333,235 square feet with the construction of the proposed residential development and decrease pervious surfaces onsite to 151,244 square feet.

The project would increase the impervious surfaces onsite by approximately 22,419 square feet or five percent, resulting in an increase in stormwater runoff. Stormwater treatment planters are proposed as part of the landscaping area throughout the project site. Depressed treatment gardens would be dispersed throughout the site to capture and clean stormwater runoff from impervious areas of the site.

Per the implementation of the SWPPP and drainage standards implemented by the City, the project would not generate significant volumes of stormwater flows into the existing drainage system. In addition, the project shall implement the conditions of approval, as listed in Post Construction impacts in *Section 4.9.2.1*, to ensure stormwater runoff is minimized.

With implementation of the standard measures listed above, the project would not result in significant impacts to the existing storm drainage system. (**Less Than Significant Impact)**

4.9.2.4 *Flood Hazards (Checklist Question g, h)*

The project site is not located within a 100-year flood hazard zone. Therefore, the project would not result in impacts related to flooding and inundation. **(No Impact)**

4.9.2.5 *Other Inundation Hazards (Checklist Question i, j)*

Dam Failure

The project site within the Lower Crystal Springs dam failure inundation hazard zone. While the project site is subject to deep inundation should the Lower Crystal Springs Reservoir fail

catastrophically, DSOD reviews and annually inspects the dams for potential failure due to a major seismic event. As discussed above, the Lower Crystal Springs Reservoir has been evaluated for the potential of an earthquake with a maximum magnitude of 8.3 on the Richter scale and the DSOD determined that the potential for dam failure would be low. While the potential inundation resulting from catastrophic dam failure could damage the project site and pose a severe hazard to public safety, the probability of such failure is extremely remote; therefore dam inundation failure is not considered a significant hazard. **(Less Than Significant Impact)**

Seiche, Tsunami, and Mudflows

The project site is a flat parcel on the valley floor and is not proximate to a large body of water. Additionally, the project site is not located within a designated tsunami inundation zone. Therefore, the proposed project would not be subject to inundation by seiche, tsunami, or mudflow. **(No Impact)**

4.9.3 Conclusion

With implementation of MM HYD-1, and the above listed standard conditions of approval, the proposed residential development would not significantly impact water quality or the stormwater system during and post-construction, nor would it be subject to (or worsen) flooding hazards/impacts. (**Less Than Significant Impact with Mitigation Incorporated)**

4.10 LAND USE AND PLANNING

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

San Mateo General Plan

The City of San Mateo 2030 General Plan was adopted in 2010, and serves as the guiding document for development, current or planned, within the limits of the city. The General Plan contains the seven elements required by state law, including land use, circulation, housing, public safety, natural resources conservation, open space, and noise. An Urban Design element has also been included in the General Plan, focusing on preserving the city image conveyed by focal points, corridors, and gateways, and discussing the design of future residential and commercial areas. The 2030 General Plan reflects the community's long-term vision, and provides the framework for land use decisions on a broad scale. Applicable General Plan policies related to land use include, but are not limited to, the following listed below.

Policies	Description
LU 1.1	Plan for land uses, population density, and land use intensity as shown on the Land Use, Height and Building Intensity and City Image Plans for the entire planning area. Design the circulation system and infrastructure to provide capacity for the total development expected in 2030. Review projections annually and adjust infrastructure and circulation requirements as required if actual growth varies significantly from that projected.
LU 1.4	Adopt and maintain the development intensity/density limits as identified on the Land Use Map and Building Intensity Plan, and as specified in Policy LU 6A.2. Development intensity/density shall recognize natural environmental constraints, such as flood plains, earthquake faults, debris flow areas, hazards, traffic and access, necessary services, and general community and neighborhood design. Maintain a density and building intensity range, with densities/intensities at the higher end of the range to be considered based on provision of public benefits such as affordable housing, increased open space, public plazas or recreational facilities, or off-site infrastructure improvements.
LU 1.5	Maintain maximum building height limits contained in Appendix C, and as specified in Policy LU 6A.2, closely matched with the Land Use categories and Building Intensity standards.
LU 1.6	Facilitate housing production by carrying out the goals and policies in the Housing Element.
LU 1.7	Allow multi-family areas to develop at densities delineated on the Land Use Plan.
LU 1.20	As a high priority support code enforcement to ensure that all uses are in compliance with City codes and conditions of development approval.
LU 4.2	Require new development to pay on an equitable basis for new or expanded public improvements needed to support the new or changed land use or development.
LU 4.30	Require all developments including parks and public places to incorporate physical security, personal safety, and traffic measures to provide a safe environment through application of crime prevention through design principles consistent with the City's Security Ordinance.
LU 4.33	Manage toxic and hazardous wastes by following the goals and policies contained in the Safety Element

Policies	Description
LU 6A.1	The City shall not approve any specific plan, rezoning, permit, subdivision, variance, or other land use permit which is not consistent with and does not implement the General Plan. Specific Plan and zoning ordinances were amended so as to conform to the General Plan by the end of 1992.
LU 6A.2	Maintain Building Height and Building Intensity maps/plans which delineate development intensity in the form of building heights and FARs in a manner which implements the height, intensity, density and design standards in the General Plan, consistent with the Building Heights and Intensities maps/plans as amended by initiative in November 1991 and November 2004.
PA 6.1	Allow minor expansion of the office uses west of South Norfolk Street and adjacent to US 101/SR 92 interchange, as delineated on the Building Height and Intensity Plan. Limit heights nearest the adjacent low-density residential areas to three stories; allow heights nearest SR 92 up to four stories.

City of San Mateo Zoning Ordinance

The Zoning Ordinance is the primary tool for implementing the policies of the General Plan and address physical development standards and criteria for the City. Government Code Section 65860 requires municipalities to maintain consistency between their zoning ordinance and their adopted general plan. One of the purposes of zoning is to implement the land use designations set forth in the general plan. Existing zoning in the City includes 23 districts and provides development standards for land uses. Although the two are distinct documents, the San Mateo General Plan and Zoning Ordinance are closely related, and State law mandates that zoning regulations be consistent with the General Plan maps and policies.

4.10.1.2 *Existing Conditions*

The Project site is currently improved with 164,709 square feet of office space and over 609 parking stalls. The existing business park consists of three 2-story buildings with perimeter parking, as shown on Figure 2.4-3. The site is bounded on the east by single-family homes along South Norfolk Street, on the north by a business park across Borel Creek, on the south by single-family homes along Adrian Avenue, and on the west by Highway 101. The site is surrounded by primarily residential and commercial land uses. A PG&É Electrical substation is also located northwest of the site, across Borel Creek.

Existing General Plan Land Use Designation

The Land Use Designation for the site in the City's General Plan is *Executive Office*, which is intended to provide, create, preserve, and enhance areas devoted primarily to conference, research, professional, and administrative activities.

Existing Zoning District

The current zoning of the site is *E1 (Executive Park)*. The purpose of the *E1* District is to encourage commercial uses which support administrative, executive, and professional office uses, and various accessory uses. Residential uses within the District are only allowed on a residential overlay district classification subject to R3 district "Minimum Development Standards" in Section 27.22.040 and

affordable housing requirements as adopted by City Council resolution, unless otherwise specified in Chapter 27.29; however, secondary units are prohibited.

4.10.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Physically divide an established community?	☐	☐	☒	☐	1,2,3
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	1,2,3,4,5
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1,2,3

4.10.2.1 *Impacts to an Established Community (Checklist Question a)*

The project proposes to demolish the existing 164,709 square foot office park and 609 parking spaces and redevelop the site with 190 for-sale residences (434,419 square feet), including a mix of two-story detached single-family residences, as well as three- and four-story attached townhomes and flats. The proposed residential development is a compatible land use with the surrounding residential and commercial uses. The project does not propose any wall or structures that would physically divide the existing community, or interfere with the movement of residents through the neighborhood, but would install sidewalks along the project frontage, and improve accessibility to the site.

4.10.2.2 *Consistency with Land Use Plans (Checklist Question b)*

General Plan

The proposed project includes a General Plan amendment from *Executive Office* to *Medium Density Multi-Family* land use designation, to allow a housing density of 18-35 units/acre or a population of 40-80 people per acre. The project proposes a density of 19 units per acre and therefore would be consistent with this land use designation.

For these reasons, the proposed project would not result in significant land use impacts from conflicts from conflicts with the General Plan. **(Less Than Significant Impact)**

San Mateo Zoning Ordinance

The project is proposing a Zoning Reclassification from *Executive Park (E1)* to *Multiple Family Dwellings, Medium Density (R-3)* to allow for residential uses on the site. The floor area ratio of

buildings and structures on a parcel in this district shall not exceed 0.85, except that the zoning administrator may grant permission to exceed the above maximum floor area ratio, if the additional floor area shall not exceed a floor area ratio of 1.0. The FAR for the proposed residential buildings is 0.89. The project is requesting a waiver to exceed the 0.85 FAR, based upon the State Density Bonus Law, which allows projects that propose affordable units to seek waiver from development regulations, such as FAR The City of San Mateo has already determined that an incentive increasing the maximum FAR does not have a specific adverse impact "so long as the project remains consistent with the City's General Plan and any applicable design guidelines." The project meets both these qualifications, and therefore, the proposed project would be consistent with this zoning district.

4.10.2.3 *Consistency with Applicable Habitat Plans (Checklist Question c)*

The project site is not subject to any adopted habitat conservation or natural community conservation plans. Implementation of the proposed project would not conflict with an adopted habitat conservation plan or natural community conservation plan. **(No Impact)**

4.10.3 Conclusion

The project would not physically divide an established community, conflict with a policy or regulation and the new residential land use would be generally compatible with adjacent residential and commercial uses. **(Less Than Significant Impact)**

4.11 MINERAL RESOURCES

4.11.1 Environmental Setting

4.11.1.1 *Existing Conditions*

The project site is located in a developed urban area in the City of San Mateo. Mineral resources within San Mateo County such as limestone deposits, rock quarries and salt evaporation ponds are located in the coastal areas, mountains and baylands. There are no known mineral resources in the vicinity of the project site.

4.11.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒	1,2
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	1,2

4.11.2.1 *Impacts to Mineral Resources (Checklist Question a, b)*

The development of the proposed residential development and related improvements on the project site would not result in the loss of availability of any known mineral resources, nor would it result in the loss of availability of any locally-important mineral resource recovery site. **(No Impact)**

4.11.3 Conclusion

The project would not result in any impacts to mineral resources. **(No Impact)**

4.12 NOISE AND VIBRATION

The following discussion is based on a Construction Noise Analysis and Environmental Noise Study prepared by *Charles M. Salter Associates, Inc. (Salter)* in September 2018 and February 2018, respectively. Copies of these reports are included in Appendix F of this Initial Study.

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

The State of California and the City of San Mateo establish guidelines, regulations, and policies which are designed to limit noise exposure at noise sensitive land uses.

State

California Building Standards Code

The State of California established exterior sound transmission control standards for new non-residential buildings, as set forth in the 2010 California Green Building Standards Code (Section 5.507.4.1 and 5.507.4.2). These standards were not altered in the 2016 revisions. For buildings located, as defined by Section 5.507.4.1, wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq (1-hr)) of 50 dBA in occupied areas during any hour of operation.

2016 California Building Code

Multi-family housing in California is subject to environmental limits defined in the 2016 California Building Code. The noise criterion is set as maximum allowable level of 45 dBA Ldn for the interior of residences.

Local

City of San Mateo General Plan

Goals and policies addressing noise issues in the community are contained in Chapter VIII of the San Mateo General Plan (Resolution No. 134-2010). The General Plan identifies policies and programs that the City shall implement during the environmental review of projects in order to minimize the noise throughout the community. Supporting policies establish exterior and interior noise level standards for various land type uses. These policies include the following listed below:

Policies	Description
N1.2	Require an acoustical analysis for new parks, play areas and multi-family common open space (intended for the use of the enjoyment of residents) that have an exterior noise level of 60 dB (L_{dn}) or above. Require an acoustical analysis that uses peak hour L_{eq} for new parks and play areas. Require a feasibility analysis of noise reduction measures for public parks and play areas. Incorporate necessary mitigation measures into residential project design to minimize common open space noise levels. Maximum exterior noise should not exceed 67 dB (L_{dn}) for residential uses and should not exceed 65 dB (L_{eq}) during the noisiest hour for public park uses.

Policies	Description
N2.1	Continue implementation and enforcement of City's existing noise control ordinance: (a) which prohibits noise that is annoying or injurious to neighbors of normal sensitivity, making such activity a public nuisance, and (b) restricts the hours of construction to minimize noise impact.
N2.2	Protect all "noise-sensitive" land uses listed in Table N-1 and N-2 (Table 4.12-1 and -2 below) of the General Plan from adverse impacts caused by noise generated onsite by new developments. Incorporate necessary mitigation measures into development design to minimize noise impacts. Prohibit long-term exposure increases of 3 dB (L_{dn}) or greater at the common property line, excluding existing ambient noise levels. "Noise-sensitive" land uses, such as residential neighborhoods, hotels, hospitals, schools, and outdoor recreation areas must be protected from new development that causes discernable increases in noise levels as a result of on-site activities. Noise generators such as machinery or parking lots must be mitigated through physical measures or operational limits.
N 2.4	Recognize projected increases in ambient noise levels resulting from traffic increases, as shown on Figure N-2. Promote the installation of noise barriers along highways where "noise-sensitive" land uses listed in Table N-1 are adversely impacted by unacceptable noise levels [60 dB (Ldn) or above]. Require adequate noise mitigation to be incorporated into the widening of SR 92 and US 101. Accept noise increases on El Camino Real at existing development, and require new multi-family development to provide common open space having a maximum exterior noise level of 67 dB (Ldn).

City of San Mateo Municipal Code

San Mateo Municipal Code, Chapter 7.30 regulates noise generated by project construction activities. Section 7.30.060, subsection (e) states that construction, alteration, repair, or land development activities authorized by a valid city permit shall be allowed at the following times:

- Weekdays: between seven am and seven pm
- Saturdays: between eight am and five pm
- Sundays and Holidays: between noon and four pm or at other such hours as authorized or restricted by the permit, so long as they meet the following conditions:

1. No individual piece of equipment shall produce a noise level exceeding 90 dB at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible.
2. The noise level outside of any point outside the property plane of the project shall not exceed 90 dB.

Table 4.12-1 (General Plan Table N-1): Noise Sensitive Land Use Compatibility Guidelines for Community Noise Environments[1] Day-Night Average Sound Level (L_{dn}), Decibels			
Land Use Category	**Normally Acceptable[2]**	**Conditionally Acceptable[3]**	**Normally Unacceptable[4]**
Single-Family Residential	50 to 59	60 to 70	Greater than 70
Multi-Family Residential	50 to 59	60 to 70	Greater than 70
Hotels, Motels, and Other Lodging Houses	50 to 59	60 to 70	Greater than 70
Long-Term Care Facilities	50 to 59	60 to 70	Greater than 70
Hospitals	50 to 59	60 to 70	Greater than 70
Schools	50 to 59	60 to 70	Greater than 70
Multi-Family Common Open Space Intended for the Use and Enjoyment of residents	50 to 67	---	Greater than 67
Table 4.12-2 (General Plan Table N-2): Noise Guidelines for Outdoor Activities Average Sound Level (L_{eq}), Decibels			
Land Use Category	**Normally Acceptable[2]**	**Conditionally Acceptable[3]**	**Normally Unacceptable[4]**
Parks, Playgrounds	50 to 65	---	Greater than 65*

[1] These guidelines are derived from the California Department of Health Services, Guidelines for the Preparation and Content of the Noise Element of the General Plan, 2003. The State Guidelines have been modified to reflect San Mateo's preference for distinct noise compatibility categories and to better reflect local land-use and noise conditions. It is intended that these guidelines be utilized to evaluate the suitability of land-use changes only and not to determine the cumulative noise impacts. Land uses other than those classified as being "noise sensitive" are exempt from these compatibility guidelines.

[2] Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

[3] Conditionally Acceptable – New construction should be undertaken only after a detailed analysis of the noise reduction requirement is conducted and needed noise insulation features included in the design.

[4] Normally Unacceptable – New construction should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

* Average Sound Level (L_{eq}) for peak hour.

4.12.1.2 *Existing Conditions*

The project is located approximately 100 feet east of Highway 101 (U.S. 101). California State Route 92 (SR 92) is approximately 800-feet to the north of the site. There is a drainage channel located directly to the north with offices and an electrical substation beyond that. Noise-sensitive receivers within 25 feet of the site are the single-family homes along the east and south property lines of the site.

To quantify the existing noise environment, *Salter* conducted four long-term noise measurements at the four edges of the project site from February 8th to 12th, 2018 (see Figure 4.12-1 for the measurement locations and measured noise levels). The monitors were at a height of 12 feet above grade. The existing noise levels at the site are as follows:

- DNL 69 dB along the Borel Creek façade (North)
- DNL 67 dB along the Adrian Avenue façade (South)
- DNL 68 dB along the S. Norfolk Street facade (East)
- DNL 77 dB along the US 101 façade (West)

4.12.1.3 *Sensitive Receptors*

Sensitive receptors in the project area include the single-family homes along the east and south property lines of the site.

NOISE MEASUREMENT LOCATIONS | FIGURE 4.12-1

4.12.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	1,2,3,4,5, 19
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1,2,3,4,5, 19
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1,2,3,4,5, 19
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	1,2,3,4,5, 19
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, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,3
f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,3

4.12.2.1 *Noise Impacts from the Project (Checklist Question a-d)*

Construction

The proposed project would take approximately 18-24 months to construct. Construction activities associated with the proposed project include site clearing and demolition (e.g., removing existing vegetation and trees and the existing structures on the project site), utility connections (e.g., new lateral connections to the existing water, sewer, and storm drain mains), building construction, frontage improvements (e.g., new street trees, new curb, gutter, sidewalk and driveway construction and placing existing overhead utility lines underground), and landscaping on the site. No more than one foot of cut or fill is planned for site development. Construction of the proposed project will require the use of noise generating construction equipment such as dump trucks, cement trucks, and bulldozers. Construction noise impacts depend upon the noise generated by various construction equipment, the timing and duration of noise-generating activities, and the distance between noise sources and noise sensitive areas. Construction noise can generally be expected to decrease by 6 dBA per doubling of distance from source to receiver.

As discussed in *Section 4.12.1* above, the San Mateo Municipal Code allows construction to take place only if one of the following conditions is met:

- No individual piece of equipment shall produce a noise level in excess of 90dBA at a distance of 25 feet; or,
- The noise level at any point outside the property plane of the project shall not exceed 90 dBA.

Table 4.12-3 below contains the sound level information for various pieces of construction equipment at a distance of 25 feet. This is not a comprehensive list; equipment not shown in the table may generate noise levels in excess of 90 dBA at a distance of 25 feet. Additionally, noise levels at property boundaries will vary depending on which equipment is being used simultaneously. As can be seen (in bold) in Table 4.12-3, the grader, pneumatic nailers, and jackhammers will exceed the 90 dBA at 25 feet criterion. For the nailers, work is typically largely interior, so the building shell will reduce the noise heard at the property line. For graders and jackhammers, the equipment would be mitigated as much as feasible.

Table 4.12-3: Noise Levels at 25 Feet

Equipment	***Noise Level at 25 ft (dBA)***
Dump Trucks	82
Front End Loader	85
Excavator	87
Grader	**91**
Bulldozer	88
Compactor	89
Stucco Drum Mixer	86
Pneumatic Nailers	**91**
Asphalt Paver	83
Back-up Beeper	82
Jackhammer	**95**

Based on the equipment noise levels listed in Table 4.12-3, the expected maximum noise levels for the various phases at the nearest property plane, were calculated. It was assumed that activity would occur at an average of 20 feet from the nearest property line with the receiver standing 10 feet away on the opposite side of the property line.[16] Actual noise levels at the site would typically be lower, since it is unlikely that all equipment would operate simultaneously. The "with mitigation" noise levels listed in Table 4.12-4 include an eight-foot tall barrier along the property line as described in MM NOI-1 below.

[16] Since the surrounding single-family homes are single-story the "receiver" is assumed to be standing at grade.

Table 4.12-4: Calculated Maximum Construction Equipment Noise Levels		
Activity	*Noise Levels (in dBA) at Property Plane*	
	Without Mitigation	*With Mitigation*
Demolition	98	88
Excavation and Grading	97	87
Building Core & Shell	95	85
Interior Work	94	84
Landscaping	99	89

Impact NOI-1: The noise generated by construction equipment could exceed the City's exterior noise level standards at adjacent property lines. **(Significant Impact)**

Mitigation Measure: The following mitigation measure would reduce impacts from the project's construction equipment noise to a less than significant level:

MM NOI-1.1: To reduce noise levels at the east and south residential property lines, temporary sound barriers shall be constructed. To be effective, the barriers need to have a minimum height of eight feet, a minimum surface density of three psf, and be continuous from grade to top. The barriers are not required along the entire length of the east and south property lines for the entire duration of construction. They must be located at times and locations where construction is occurring within 30 feet of these property planes.

Pneumatic nailers shall not be used during construction on the roofs of the two story single-family homes within 30 feet of the residential property planes, as the eight-foot barriers would be ineffective with the noise source at this height.

MM NOI-1.2: The City has Conditions of Approval that limit hours of construction hours from 7:00 a.m. to 7:00 p.m. on Monday through Friday, between 9:00 a.m. and 5:00 p.m. on Saturday, and between 12:00 noon and 4:00 p.m. on Sundays and holidays. The noise report found that the impact would be significant and therefore proposed the additional standard measures to minimize annoyance to neighboring properties:

- Use scrapers in lieu of loaders and hauling trucks as feasible for earth removal.
- Use a motor grader rather than a bulldozer for final grading.
- Locate noisy stationary equipment (e.g., generators and compressors) and material unloading and staging areas near the center of the project, away from residential property lines
- Locate staging and equipment loading areas away from residences. Where feasible, barriers should be used to break line-of-sight with nearby residences.
- Minimize drop height when loading excavated materials onto trucks.

- Minimize drop height when unloading or moving materials on site.
- Require that all construction equipment be in good working order and that mufflers are inspected to be functioning properly. Avoid unnecessary idling of equipment and engines.
- Use "quiet" gasoline or electric-powered compressors.
- Use electric forklifts when feasible.
- Use electric nailers instead of pneumatic nailers or manual hammers as feasible – especially on the roofs of the two-story single-family homes.
- Power saws should be shielded or enclosed where practical.
- Only use back-up beepers when required by law. Spotters or flaggers should be used in lieu of back-up beepers to direct backing operations when allowable.
- Notify the City and neighbors in advance of the schedule for each major phase of construction and expected loud activities.
- Require posted signs at the construction site that include permitted construction times, a contact for the job site, and a contact number for the City in the event of problems.
- Designate a construction noise coordinator. This coordinator would be available to respond to complaints from neighbors and take appropriate measures to reduce noise.

The proposed project, with implementation of the above mitigation measures MM NOI-1.1 and MM NOI-1.2 would reduce construction-related noise impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

Operational Noise

A significant impact would occur if the permanent noise level increase due to project-generated traffic would be three dBA L_{dn} or greater at noise sensitive receptors for existing levels exceeding 60 dBA L_{dn}, or five dBA L_{dn} or greater for existing levels at or below the 60 dBA L_{dn}. For reference, a three dBA L_{dn} noise increase would be expected if the project would double existing traffic volumes, and five dBA L_{dn} noise increase if the project would triple existing traffic volumes. As discussed further in *Section 4.16 Transportation/Traffic*, vehicle trips of the proposed project traveling to and from the site would generate a net negative 47 trips during the AM peak hour and net negative 36 trips during the PM peak hour and 160 total trips over the entire day, and therefore, would not increase traffic noise levels on the surrounding roadway network. **(Less Than Significant Impact)**

4.12.2.2 *Aircraft Noise (Checklist Question e, f)*

As discussed in *Section 4.8 Hazards and Hazardous Materials*, the project site is not located within the Airport Influence Area (AIA) or noise contour area of any nearby airports and, therefore, would not be impacted aircraft related noise. **(No Impact)**

4.12.3 Project Noise Issues Not Covered Under CEQA

The California Supreme Court issued an opinion in "CBIA vs. BAAQMD" holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents. The ruling provided for several exceptions to the general rule where an analysis of the environment on the project is warranted, including if the project is exposed to potential noise and safety impacts on the project occupants due to proximity to an airport (PRC 21096). Nevertheless, the City has policies and regulations (including those identified in *Section 4.12.1.2*) that address existing conditions affecting a proposed project, which are discussed below.

4.12.3.1 *Exterior and Interior Noise Effects*

In order to determine ambient noise levels at the site, long-term measurements were taken beginning on February 8, 2018 and ending on February 12, 2018 at the four edges of the site, as shown on the Figure 4.12-1, above.

Values of Ldn at all measurement locations are in excess of what is typically allowable for residences under the San Mateo General Plan. Location 1 experienced higher noise level as it is closer to Highway 101. As the projected future traffic volumes for the roadways was not known, therefore one dB was added to the measured noise levels to account for future traffic increases.[17]

The site is in an area which has noise levels in excess of the guidelines set forth in the San Mateo General Plan. The General Plan calls for residential areas to have exterior noise exposure which is limited to 67 dBA Ldn and an interior noise exposure of 45 dBA Ldn or lower. The residences that directly face the freeway would have the highest exposure of 77 dBA Ldn. The units facing the residences on south and east would have an exposure of 67-68 dBA Ldn. The units facing the electrical substation and office park on north would have an exterior noise level exposure of approximately 69 dBA Ldn. This represents an exposure considered unacceptable under City policy. With the proposed conditions of approval as stated below, the City of San Mateo General Plan goal and the California Building Code criterion of 45 dBA Ldn exposure in the interior and 67 dBA Ldn in the exterior can be met.

[17] The California Department of Transportation assumes a traffic volume increase of three-percent per year, which corresponds to a one-dB increase in DNL over a ten-year period.

Interior Noise Exposure

The existing noise levels in the project areas exceed the City's General Plan standards for interior noise exposure. The following conditions of approval would reduce interior noise levels to levels consistent with City policy:

Conditions of Approval

The applicant shall indicate on the building permit plan set, the necessary information to meet the State's and City's indoor DNL 45 dB criterion to sound-rate the facades. The proposed project would be required to incorporate the window and exterior door STC ratings in accordance with the noise technical report (see appendix F), and as shown on Figures 4.12-2 and 4.12-3. The STC ratings shall be applicable for full window assemblies (glass and frame) rather than just the glass itself. For reference, typical construction-grade dual-pane windows achieve an STC rating of 28. One-inch glazing assemblies (two 1/4-inch thick panes with a 1/2-inch airspace) achieve an STC rating of 32. Where STC ratings above 33 are required, at least one pane will likely need to be laminated.

Per the Code, sound-rated windows are only needed in "habitable" rooms. Therefore, bathrooms/powder rooms and garages do not require sound-rated windows. Where sound-rated windows are needed, an alternative method of supplying fresh air (e.g., mechanical ventilation, z-ducts) would be considered.

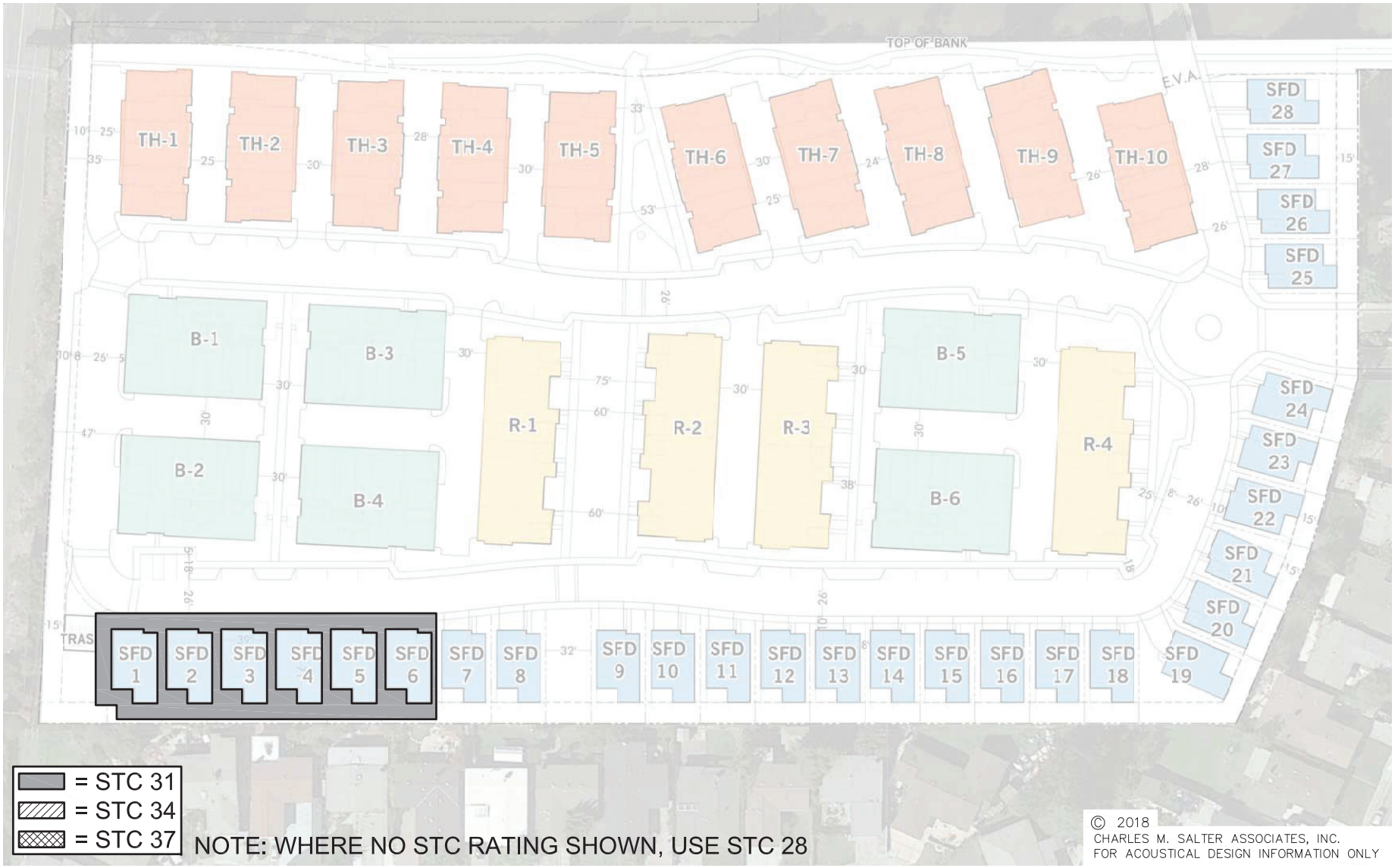
Exterior Noise Exposure

The existing noise levels in the project areas exceed the City's General Plan standards for exterior noise exposure. The following conditions of approval would reduce exterior noise levels consistent with City policy:

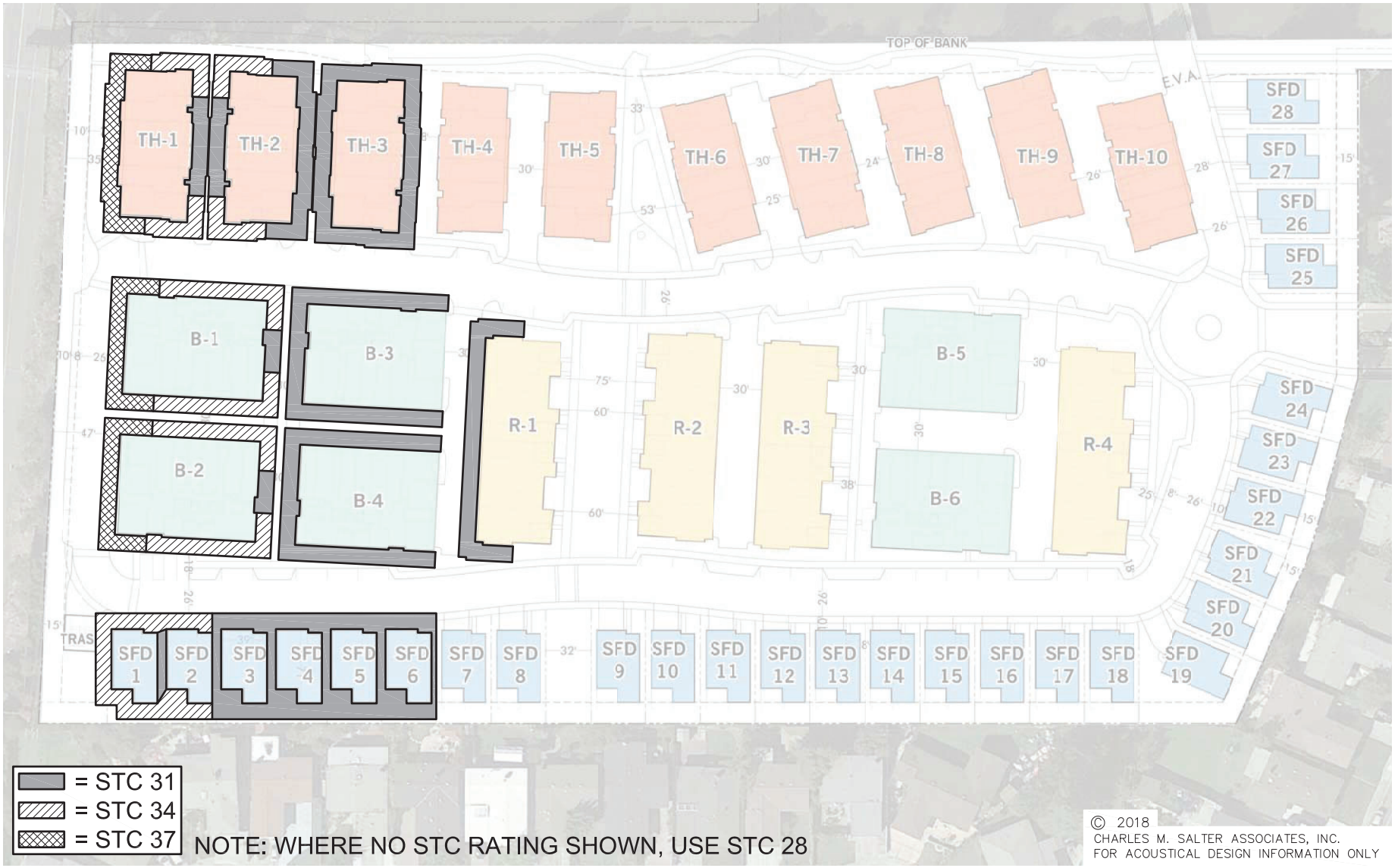
Conditions of Approval

The applicant shall indicate on the building permit plan set to meet the City'd outdoor DNL 67 dB criterion and shall construct a noise barrier along U.S. 101 at the south of the project site, as specified in MM NOI-1.1. The barrier shall extend northward (at the same height) for the full length of the site along U.S. 101. With the extended highway noise barrier, noise levels in the ground level common outdoor use spaces will range from DNL 63 to 65 dB, meeting the City's maximum allowable DNL 67 dB noise criteria.

Noise levels at the common roof decks of the nine-unit block buildings (B-1 through B-6) were calculated to be DNL 63 to 67 dB, also meeting the City's noise criteria.



STC RATINGS FOR WINDOWS AND EXTERIOR DOORS (LEVEL 1) | FIGURE 4.12-2



STC RATINGS FOR WINDOWS AND EXTERIOR DOORS (LEVEL 2 to 4)

FIGURE 4.12-3

4.12.4 Conclusion

The proposed project, with implementation of mitigation measures MM NOI-1.1 and MM NOI-1.2, would reduce impacts from the project's construction equipment noise to a less than significant level. Implementation of the aforementioned conditions of approval would reduce interior and exterior noise level impacts to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.13 POPULATION AND HOUSING

4.13.1 Environmental Setting

4.13.1.1 *Regulatory Framework*

State

California Housing Element

California's Housing Element Law requires all cities to: 1) zone adequate lands to accommodate its Regional Housing Needs Allocation (RHNA); 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.

Regional

Association of Bay Area Governments

The Association of Bay Area Governments (ABAG) allocates regional housing needs to each city and county within the nine-county Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, Metropolitan Transportation Commission, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population and Housing (upon which Plan Bay Area 2040 is based), which is an integrated land use and transportation plan looking out to the year 2040 for the nine-county San Francisco Bay Area.

Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use and housing plan intended to support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The project site is not located within a PDA.

Local

San Mateo General Plan

The San Mateo General Plan contains Land Use policies that support a wide variety of land uses and substantial growth of both the commercial and residential sectors. The following General Plan Land Use Policies are relevant to the proposed project.

Policies	Description
LU 1.6	Facilitate housing production by carrying out the goals and policies in the Housing Element.
LU 1.7	Allow multi-family areas to develop at densities delineated on the Land Use Plan.
H 2.2	Maintain an overall balance of housing and employment within the community over the term of the Plan.

4.13.1.2 *Existing Conditions*

According to the California Department of Finance, the City had a population of approximately 104,490 residents as of January 1, 2018.[18] The Association of Bay Area Governments (ABAG) projects the City's population will be 126,000 by 2040.[19]

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. When the ratio reaches 1.0, a balance is stuck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. In the City of San Mateo, the jobs/employed person ratio in 2000 was nearly balanced, with an employment level of 52,300 jobs and a labor force of 51,630 employed residents, representing 1.01 jobs per employed resident, as indicated by ABAG. The current commercial use of the project site provides no housing.

4.13.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	1,2,3,4,5
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2

4.13.2.1 *Population Growth (Checklist Question a)*

The project proposes construction of 190 new residential units. Based on an average of 2.63 persons per household for City of San Mateo[16], the project would result in a net increase in local population by approximately 500 new residents. The ABAG growth projections and the implementation of the proposed General Plan Update could result in a population of 119,800 people, approximately 48,360 dwelling units, and 65,300 jobs at buildout. One of the reasons for the increase in population, housing, and jobs is considered to be increased infill development. The jobs/housing balance as a result of the proposed General Plan Update at buildout would be 1.35/1 (65,300 jobs/48,360 dwelling units at buildout). Assuming three employees per 1,000 square feet of office space, the proposed project would remove 494 existing employees from the area. The project proposes a GPA residential

[18] California Department of Finance. "E-5 City/County Population and Housing Estimates." Accessed: September 5, 2018. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.
[19] Association of Bay Area Governments. *Plan Bay Area: Projections 2013*. December 2013.

use on-site, however, would not generate more growth than what was assumed in the City's General Plan.

According to the current Housing Element of the General Plan (2015-2023), inflation of home values has greatly outpaced increases in household income levels, resulting in a critical housing affordability gap. The proposed project would incrementally reduce the affordability gap by increasing housing inventory. The impact would be less than significant**. (Less Than Significant Impact)**

4.13.2.2 *Displacement of Housing or People (Checklist Questions b, c)*

There are no existing residential uses on the project site; therefore, the project would not displace any existing housing or people, and would not necessitate the construction of replacement housing elsewhere. **(No Impact)**

4.13.3 Conclusion

The proposed project would not result in significant population and housing impacts. **(Less Than Significant Impact)**

4.14 PUBLIC SERVICES AND RECREATION

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Quimby Act - Parks

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the State. This legislation was in response to California's increased rate of urbanization and the need to preserve open space and provide parks and recreation facilities for California's growing communities. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two.

School Facilities

Government Code Section 65996California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Sections 65995-65998 sets forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation goes on to say that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

In accordance with California Government Code Section 65996, developers pay a school impact fee to the school district to offset the increased demands on school facilities caused by their proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Local

City of San Mateo General Plan

Applicable General Plan policies related to public services include, but are not limited to, the following listed below.

Policies	Description
LU 4.10	Provide Police Station facilities to meet the facility requirements through 2030.
LU 4.24	Maintain fire inspection staffing levels to meet existing needs and the projected 2025 population, employment and development, and inspections mandated by other governmental agencies.
LU 4.25	Continue fire apparatus replacement and maintenance programs to provide a high state of readiness.
LU 4.29	Maintain facilities, equipment, and personnel to provide an effective police force to serve existing and future population and employment as identified in the Land Use Element.
LU 4.30	Require all developments including parks and public places to incorporate physical security, personal safety, and traffic measures to provide a safe environment through application of crime prevention through design principles consistent with the City's Security Ordinance.

Policies	Description
C/OS 12.1	Provide the appropriate mix of parkland that balances the needs of active and passive facilities, that are accessible for all residents, and that meet existing and future recreation needs.
C/OS 12.2	Adopt and use the Park and Recreation Facility Standards to assess the adequacy of existing facilities, designing, developing and redeveloping sites, and acquiring or accepting new sites.
C/OS 12.3	Create an asset management plan that identifies the highest and best use of undeveloped parcels or underutilized areas within existing parks to insure they are best positioned to meet current and future needs and where appropriate, identify options for alternative uses.
C/OS 12.7	Preserve existing parklands, open spaces and the golf course for open space and recreational use as directed by ordinance.
C/OS 13.1	Maintain the park system by a set of maintenance standards that reflect community values and in a manner that maintains, promotes, and optimizes positive use, and prevents degradation of facilities and ensures that particular equipment and facilities are maintained in a safe condition.
C/OS 13.2	Give priority to Capital Improvement Program projects that rehabilitate facilities that have become or will become costly to maintain, only marginally usable, or unusable without action.
C/OS 13.3	When existing parks undergo reconstruction or rehabilitation the site facilities and layout must be reviewed to determine if they effectively meet community needs, and whether modification would provide significant benefits in relation to costs.
C/OS 13.4	Utilize an infrastructure lifecycle management program that extends the useful life of all park and recreation assets and insures that sufficient funds are available for replacement or major rehabilitation.
C/OS 14.9	Establish principles for all new or renovated parks to maximize productivity, efficiency and community value.

City of San Mateo Parkland Dedication/Fees

The City of San Mateo has established standards for dedication of land or payment of in-lieu fees for park and recreation facilities serving new residential subdivisions (Chapter 26.64 of the City of San Mateo Municipal Code). The code sets a standard of two acres per 1,000 residents to be dedicated by residential developers, with fees based on the value of real property and the number of residents estimated for various unit sizes. The Municipal Code also establishes park impact fees for residential units not subject to Chapter 26.64. In Section 13.05.070 of the Municipal Code, the City outlines land dedication requirements and fees for residential units that are not subject to Chapter 26.64. Fees and land dedications are calculated in the same manner as described in Chapter 26.64, while the applicability to residential projects varies.

4.14.1.2 *Existing Conditions*

Fire Protection Services

The San Mateo Fire Department (SMFD) provides fire protection services in the City of San Mateo. The department uses six fire stations: Station 21, located in the downtown area at 120 S. Ellsworth Avenue, Station 23 located at 31 W. 27th Avenue, Station 24 located at 319 S. Humboldt Street, Station 25 located at 545 Barneson Avenue, Station 26 located at 1500 Marina Court, and Station 27 located 1801 De Anza Boulevard. The nearest station to the project site is Station 26, which is 0.3 miles southeast of the site.

The SMFD has approximately 90 full-time employees including operations (which makes up the majority of the staff), training, administration, fire prevention, and support staff. Daily staffing of the

Operations Division consists of one battalion chief, seven fire captains, and 15 firefighter/paramedics operating out of six fire stations. All fire stations are staffed 24 hours per day, 365 days per year. Each fire station has one fire engine staffed by one fire captain and two firefighters/engineers. The SMFD responds to over than 8,000 emergency calls annually. The SMFD response time to 90 percent of the calls is typically six minutes and 18 seconds.

The San Mateo Fire Department reviews applications for new projects to ensure that they comply with the City's current codes and standards.

Police Protection Services

The San Mateo Police Department (SMPD) provides protection services which serve the City of San Mateo. Mutual and automatic aid agreements with the San Mateo County Sheriff's Department and the police departments of Foster City, Belmont, and Hillsborough increases the City's capacity to respond to calls in the jurisdictional boundary areas and to emergency events. The main police station is located at 200 Franklin Parkway in San Mateo, which is approximately three miles south of the project site.

In addition to the response agreements with the surrounding jurisdictions, the SMPD has a State Mutual Aid Agreement with the County Sheriff to provide services in emergency situations.

The San Mateo Police Department has 114 sworn full-time officers (one chief, one deputy chief, two captains, six lieutenants, 17 sergeants, and 87 officers), 15 dispatchers, nine community service officers, and five administrative staff who provide police services and public safety dispatching to approximately 100,000 residents for the City of San Mateo.

Schools

The City of San Mateo is served by two primary and secondary education public school districts: the San Mateo-Foster City School District serves grades K–8; the San Mateo Union High School District serves grades 9–12. The San Mateo-Foster City School District operates 20 schools, including 14 elementary schools (kindergarten through fifth grade), five middle schools (sixth through eighth grades), and one combined elementary and middle school (kindergarten through eighth grade), in the cities of San Mateo and Foster City. The San Mateo Union High School District operates seven high schools, one continuation school, and one adult school in the cities of San Mateo, Burlingame, San Bruno, and Millbrae.

Students generated from the project would likely attend Parkside Elementary School (located at 1685 Eisenhower Street, approximately 0.8 mile north of the site), Bayside Academy (2025 Kehoe Avenue, 1.2 miles northwest of the site)[20] and Hillsdale High School (3115 De Monte Street, 2.5 miles southwest of the site).[21]

[20] San Mateo – Foster City School District. *School Assignments*. Available at: http://www.smfcsd.net/assets/files/documents/smfcsd-map-2014-2015.pdf. Accessed July 12, 2018.
[21] San Mateo Union High School District. *School Locator*. Available at: https://www.smuhsd.org/Page/2314. Accessed July 12, 2018.

Parks and Recreation Facilities

The City of San Mateo has 40 parkland sites, open space areas, and more than 40 miles of paths and trails. Recreational facilities include baseball and softball fields, soccer fields, tennis courts, basketball and volleyball courts, golf courses, swimming pools, dog parks, skate areas, playgrounds, gardens and picnic areas. The nearest parks/recreational facilities are Lakeshore Park (approximately 0.3 mile southeast of the site), Fiesta Meadows Park (approximately 1.2 mile west of the site) and Washington Playground (approximately 0.7 mile northwest of the site).

Based on General Plan Policy C/OS 12.2, the City's acreage goal for parkland and recreational facilities is six acres per 1,000 population. San Mateo's six -acre goal includes 1.5 acres of neighborhood parkland per 1,000 persons and 4.5 acres of community and regional parkland per 1,000 persons. Based on a population of approximately 100,000, the ratio of existing neighborhood and community (including mini parks, regional parks, and Coyote Point County Park) park and recreational facilities to population is five acres per 1,000 persons. To achieve the City's parkland goal, the City requires residential developers to dedicate two acres of parkland per 1,000 residences or a payment of fees in lieu of dedicating parkland to the City.

Libraries and Community Centers

There are three public libraries located within the City of San Mateo. The nearest public library is the Marina Public Library, approximately 0.4 mile northeast of the project site. The City of San Mateo has six community centers within the city limits. The nearest community center is the Golden Gate Regional Center, 0.9 mile south of the project site.

4.14.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services:					
- Fire Protection?	☐	☐	☒	☐	1,2
- Police Protection?	☐	☐	☒	☐	1,2
- Schools?	☐	☐	☒	☐	1,2
- Parks?	☐	☐	☒	☐	1,2
- Other Public Facilities?	☐	☐	☒	☐	1,2

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐	1,2
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐	1,2

4.14.2.1 *Impacts to Public Services and Recreational Facilities (Checklist Question a - c)*

Fire Protection

The project proposes to demolish the existing 164,709 square foot office park and 609 parking spaces and redevelop the site with 190 for-sale residences (434,419 square feet) and 425 vehicular parking spaces and 285 bicycle parking spaces. The project site is within the existing service area of the SMFD and the project would be constructed in accordance with current fire code requirements. In addition, the project would be reviewed by SMFD to ensure that the project would have adequate infrastructure for firefighting services and adequate security features. For these reasons, the project would not result in the need for new or expanded facilities. **(Less Than Significant Impact)**

Police Protection

The proposed redevelopment of the 11.1-acre project site would increase the density of development on the site and would, therefore, incrementally increase the need for police protection services and parking enforcement in the project area. However, the increase is not expected to be substantial. The project would be designed and constructed in accordance with current codes, including the City's Security Ordinance, and reviewed by the San Mateo Police Department to ensure appropriate safety features are incorporated into the project design. The police department currently provides services to the existing office use on the site when required and will continue to do so with the proposed project. With an anticipated increase of 500 new residents, the project would not represent a significant demand for increased staffing to serve the site. **(Less Than Significant Impact)**

Schools

Based on the San Mateo – Foster City School District's student generation rates of 0.10 student per residential unit for elementary schools and 0.04 student per unit for middle schools[22], the 190-unit project would generate approximately 19 new students at Parkside Elementary School and eight new students at Bayside Academy. Using the San Mateo Union High School District's student generation rate of 0.04 high school student per residential unit, the project would generate approximately eight new high school students at Hillsdale High School.

[22] San Mateo – Foster City School Board. *Projected Enrollments 2017-18 to 2024-25*. March 8, 2018.

The incremental increase of students attending local schools is not expected to require construction of a new school or physical modification of existing schools. The project shall implement the following Standard Permit Condition as a condition of approval for the project.

Condition of Approval

In accordance with California Government Code Section 65996, the developer shall pay a school impact fee to the School District, to offset the increased demands on school facilities caused by the proposed project.

School impact fees will be paid to the affected school districts prior to the issuance of a building permit by the City. School districts would then be responsible for implementing the specific methods for mitigating school impacts under the Government Code. The responsibility for payment of school impact fees would lie with the project applicant. By law, payment of the school impact fee is considered adequate mitigation and no further mitigation would be required to offset the impact of projected increases in student populations from the proposed project. **(Less Than Significant Impact)**

Parks and Recreation

To meet San Mateo's demand for parks and open space, the City uses the Quimby Act (California Government Code, Section 66477), which allows cities to require builders of residential subdivisions to dedicate land for parks and recreational areas, or pay an open space fee to the City. Based on the City's Municipal Code Chapter 26.64, San Mateo requires developers to dedicate at least two (2) acres of parkland for each 1,000 persons who will live in a new housing project (owned or rented) to reduce the demand for existing park and recreational facilities. Since the project is an infill development with limited space available to provide publicly accessible parkland, the proposed project would be consistent with the City's General Plan by paying the City's park in-lieu fees to reduce impacts to a less than significant level, as stated below.

Conditions of Approval

The applicant shall pay a park impact fee (SMMC Section 13.05.070) or a fee in-lieu of dedication of lands for park and recreation purposes (park in-lieu fee) (SMMC Chapter 26.64). The final fee shall be determined upon approval of the final map for the park In-lieu fee or prior to the issuance of the building permit for the park impact fee. The park in-lieu fee shall be paid prior to the release of the final map for recordation and the park impact fee shall be paid prior to the issuance of the building permit. If a project with an approved tentative map is issued a building permit prior to the approval of the final map, the applicant shall be subject to the payment of the park impact fee only prior to the issuance of the first building superstructure permit.

The proposed project would include approximately 181,358 square feet of open space area, including a new central community open space and play area, communal garden, creek walk, and dog park. New residents of the site would also use existing recreational facilities in the area, including Lakeshore Park and Fiesta Meadows Park. These on-site amenities would further offset the proposed project's impact on existing park facilities. **(Less Than Significant Impact)**

Library and Community Centers

There are 12 libraries serving neighborhoods located throughout San Mateo. Although the proposed project would add 500 new residents to the area, and therefore increase the use of public facilities such as the Marina Public Library and Golden Gate Regional Center, the proposed project would not substantially increase use of public facilities or otherwise require the construction of new or expanded library facilities. **(Less Than Significant Impact)**

4.14.3 Conclusion

Payment of required fees under Government Code Section 65996 would offset demand placed on existing school facilities by the proposed project. Dedication of parkland and/or payment of in-lieu fees under Government Code Section 66477 would suffice to reduce impacts to park and recreational facilities created by the proposed project. Fire and police services in San Mateo are currently equipped to serve new residents of the proposed project without hindering their ability to meet service goals or requiring the construction of new facilities. For these reasons, the proposed project would not result in significant public services and recreation impacts. **(Less Than Significant Impact)**

4.15 TRANSPORTATION/TRAFFIC

The discussion in this section is based on a Traffic Impact Analysis report prepared by *Hexagon Transportation Consultants*, *Inc.* in November 2018. This report is included in this Initial Study as Appendix G.

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

Regional

Regional Transportation Planning

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including San Mateo County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes the region's Sustainable Communities Strategy (integrating transportation, land use, and housing to meet GHG reduction targets set by CARB) and Regional Transportation Plan (including a regional transportation investment strategy for revenues from federal, state, regional and local sources over the next 24 years).

City/County Association of Governments

The City/County Association of Governments of San Mateo County (C/CAG) works on issues that affect the quality of life in general: transportation, air quality, stormwater runoff, airport/land use compatibility planning, hazardous waste, solid waste and recycling. C/CAG, as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The CMP is required to be consistent with the MTC planning process that includes regional goals, policies, and projects for the Regional Transportation Improvement Program. [23]

The proposed project is estimated to not add more than 100 peak hour vehicle trips to any CMP roadways designated by the C/CAG. Therefore, an analysis under CMP guidelines was not required for the proposed project.

Senate Bill 743

Senate Bill 743 was passed in 2013 and mandated a shift in the metrics used for transportation analysis under CEQA from Levels of Service (LOS) to Vehicle Miles Traveled (VMT). The Governor's Office of Planning and Research (OPR) incorporated this requirement into its *Updates to the CEQA Guidelines* in November 2017. Given that no standard approach or guidelines have been adopted by the City of San Mateo, the VMT presented in this report is for information only.

[23] C/CAG of San Mateo County website. http://ccag.ca.gov/programs/transportation-programs/congestion-mangement/. Accessed September 21, 2018.

Local

San Mateo County Comprehensive Bicycle Route Plan

The San Mateo County Comprehensive Bicycle Route Plan was written by the C/CAG, the Bicycle and Pedestrian Advisory Committee, and individual cities and agencies. The intent of the plan is to provide a comprehensive bicycle network for San Mateo County and adjacent communities, to improve inter-city and regional travel for bicycles. The plan includes existing roadways within San Mateo County, including roadways in the Project area.

City of San Mateo General Plan

The City of San Mateo 2030 General Plan contains goals and policies related to traffic and circulation patterns that are relevant to the proposed project. The General Plan includes goals and policies relating to traffic fees for new developments, required consistency with alternative transportation plans, and parking standards, amongst others. General Plan policies and elements that are relevant to the proposed mixed-use project are listed below:

Policies	Description
C 2.1	Maintain a Level of Service no worse than mid LOS D, average delay of 45.0 seconds, as the acceptable Level of Service for all intersections within the City.
C 2.4	Require new developments to pay for on-site improvements to meet the needs of development and their proportionate share of the costs for mitigating cumulative traffic impacts within the City of San Mateo. Utilize a Transportation Fee Ordinance to finance necessary off-site improvements equitably. The off-site improvements will include intersection and street improvements to maintain intersection levels of service, traffic safety improvements and improvements to reduce single occupant vehicle trips such as bicycle system enhancements, pedestrian improvements, and trip reduction measures.
C 2.5	Require site-specific traffic studies for development project where there may be a substantial impact on the local street system. Traffic impacts caused by a development project are considered to be unacceptable and warrant mitigation if the addition of project traffic results in a cumulative intersection level of service exceeding the acceptable level established in Policy C-2.1; where there may be safety hazards created; or where there may be other substantial impacts on the circulation system.
C 2.7	In addition to paying the transportation impact fee, a development project may be required to fund off-site circulation improvements which are needed as a result of project generated traffic if: a) The level of service at the intersection drops below mid-level LOS D (average delay of more than 45 seconds) when the project is added, and b) An intersection that operates below its level of service standard under the base year conditions experiences an increase in delay of four or more seconds, and c) The needed improvement of the intersection(s) is not funded in the applicable five-year City Capital Improvement Program from the date of application approval.
C 2.10	Participate in the TDM Program as outlined by the San Mateo City/County Association of Government (C/CAG). Encourage TDM measures as a condition of approval for development projects, which are anticipated to cause substantial traffic impacts. C/CAG requires the preparation of a TDM program for all new development that would add 100 peak hour trips or more to the regional road network.

Policies	Description
C 4.1	Implement the Bicycle Master Plan's recommended programs and projects to create and maintain a fully-connected safe and logical bikeways system; support the City's Sustainable Transportation Actions; and coordinate with the countywide system.
C 4.4	Implement the Pedestrian Master Plan's recommended programs and projects to create and maintain a walkable environment in San Mateo and support the City's Sustainable Transportation Actions.
C 4.5	Continue to require as a condition of development project approval the provision of sidewalks and wheelchair ramps where lacking and the repair or replacement of damaged sidewalks. Require that utility poles, signs, street lights, and street landscaping on sidewalks be placed and maintained to permit wheelchair access and pedestrian use. Increase awareness of existing trails and routes by promoting these amenities to residents.
C 4.6	Continue to assess and improve wheelchair access throughout the City. Install wheelchair ramps or take other corrective measures where most needed in accordance with the established Citywide Wheelchair Program.
C 4.7	Pedestrian safety shall be made a priority in the design of intersection and other roadway improvements.
C 5.1	a) Adopt parking requirements to provide adequate parking supply as a condition of development approval. b) Adopt parking requirements to provide adequate parking supply for change and/or expansion of land use resulting in increased parking demand.
C 5.2	Seek new parking garage sites for public acquisition within the CPID adequate to accommodate the parking needs of new development. Allow in-lieu parking fees within the CPID as a substitute for providing required non-residential parking on-site.
C 6.6	Reduce fuel consumption and vehicle emissions for trips originating in or destined for the City of San Mateo by providing incentives for the purchase and use of fuel efficient vehicles such as recharging station for electric vehicles or preferential parking for carpools, hybrids, and alternative fuel vehicles and develop a way to make this action enforceable and by providing discounted parking rates for carpools, hybrids, and other vehicles that help reduce CO2 emissions.

4.15.1.2 *Existing Conditions*

Roadway Network

Regional Access

US 101 is an eight- to ten-lane north-south freeway in the vicinity of the site. US 101 extends northward through San Francisco and southward through San Jose. Access to and from the project study area is provided via its interchanges at Hillsdale Boulevard and Fashion Island Boulevard.

SR 92 is a four- to six- lane east-west freeway extending from Half Moon Bay in west San Mateo County to Hayward in Alameda County. SR 92 has a full interchange with US 101. Access to the project site is provided via its interchanges at Delaware Avenue and Fashion Island Boulevard.

Local Access

Hillsdale Boulevard is a four- to six-lane east-west major arterial within the project vicinity with a posted speed limit at 35 miles per hour (mph). The arterial spans from Beach Park Boulevard in Foster City to Perimeter Road in the west San Mateo. Within the project vicinity, on-street parking is

permitted between Pacific Boulevard and Saratoga Drive. Sidewalks are present along both sides of the street. Hillsdale Boulevard provides project access via Norfolk Street.

Fashion Island Boulevard is a two- to four-lane east-west arterial north of the project site. The arterial spans from Bridgepoint Parkway in the east to 19th Avenue in the west with a posted speed limit at 35 mph. On-street parking is not allowed along Fashion Island Boulevard in the vicinity of the project site. Sidewalks are present along the south side of the street, and Class II bicycle lanes exist on Fashion Island Boulevard/19th Avenue east of Delaware Street. Fashion Island Boulevard provides project access via Norfolk Street.

Norfolk Street is a north-south roadway that functions as an arterial street between Hillsdale Boulevard and 3rd Avenue. It continues as a collector street northward to Huron Avenue and southward to Los Prados Street. In the vicinity of the project site, it has two lanes with a speed limit at 25 mph and on-street parking permitted along both sides. Sidewalks are present along both sides of the street. Class II bicycle lanes exist on Norfolk Street between Crio Avenue and Fashion Island Boulevard. Norfolk Street provides access via Waters Park Drive.

Waters Park Drive is a two-lane loop road circumnavigating the project site and connecting the project main driveway to Norfolk Street. Sidewalks are present along both sides of the street.

Pedestrian and Bicycle Facilities

Within the project vicinity, a Class I bicycle path - Foster City Pedway/Bikeway is located east of the project site. Class II bicycle lanes exist on Norfolk Street between Crio Avenue and Fashion Island Boulevard, on 19th Avenue/Fashion Island Boulevard east of Delaware Street, on Grant Street between 19th Avenue and Concar Drive, and on Concar Drive between Grant Street and Delaware Street. Hillsdale Boulevard between Edison Street and Norfolk Street, as well as Pacific Boulevard north of 42nd Avenue, are both City-designated Class III bike routes. Overall, the existing bicycle facilities adequately connect the project site with surrounding land uses.

Pedestrian facilities near the project site consist of sidewalks along both sides of all roadways, as well as crosswalks at all signalized intersections. Within the immediate vicinity of the project site, crosswalks are lacking across the north and south legs at the Norfolk Street and Waters Park Drive intersection, and across the south leg at the Norfolk Street and Fashion Island Boulevard intersection.

Transit Service

Existing transit service to the study area is provided by the San Mateo County Transit District (SamTrans) and Alameda-Contra Costa County Transit District (AC Transit). Caltrain is located 1.5 miles west of the site and is accessible via bike or shuttle service. Samtrans bus services and the locations of the nearest bus stops are described below.

<u>San Mateo County Transit District (SamTrans)</u>

The 250 line operates on Norfolk Street within the study area, providing service between College of San Mateo and San Mateo Caltrain Station. The line operates with approximately 30-minute headways during the AM and PM peak periods. The bus stop closest to the project site is at the

intersection of Norfolk Street and Fashion Island Boulevard (approximately 850 feet from the project site).

The 59 line operates on Norfolk Street within the study area, providing service between Aragon High School and Norfolk Street/Hillsdale Boulevard area. The line operates twice in the morning and twice in the afternoon on school days only and stops at the Norfolk Street and Fashion Island Boulevard bus stop (approximately 850 feet from the project site).

Caltrain Service

The project site is located about 1.5 miles northeast of the Hillsdale Caltrain station, which is about a 10- to 15-minute bike ride. Caltrain provides service with approximately 10- to 30-minute headways at the Hillsdale Caltrain station during the weekday AM and PM commute hours and 60-minute headways midday, at nights and on weekends. The Hillsdale Caltrain station provides baby bullet train service. Continuous pedestrian facilities exist between the project site and the Caltrain station. The Norfolk Caltrain shuttle provides free shuttle runs between the Hillsdale Caltrain Station and various office buildings in the area during commute hours, as well as serving the residential areas of Lakeshore and Fiesta Gardens. The shuttle departure and arrival schedules are coordinated with the Caltrain schedules to minimize transfer wait times. There are three shuttles departing the station between 7 AM and 9 AM, and three shuttles arriving at the station between 4 PM and 6 PM. Currently, there is a bus stop (Waters Business Park) serving the project site.

4.15.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
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?	☐	☐	☒	☐	1,2,3,21
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?	☐	☐	☒	☐	1,2,3,21
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?	☐	☐	☒	☐	1,2,3

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☒	☐	1,2,3,4,5
e) Result in inadequate emergency access?	☐	☐	☒	☐	1,2,3,21
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?	☐	☐	☒	☐	1,2,3,21

The traffic impacts of the project are evaluated against the following criteria to determine whether the impacts are significant.

City of San Mateo Definition of Significant Intersection Impacts

Per the City's General Plan Policy C 2.7, all projects are required, at a minimum, to pay a transportation mitigation fee. The transportation mitigation fee is used to fund planned transportation improvements that are identified in the City of San Mateo Traffic Mitigation Program.
In addition to paying the transportation impact fee, a development project may be required to fund off-site circulation improvements which are needed as a result of project generated traffic if:

a) The level of service at the intersection drops below mid-level LOS D (average delay of more than 45 seconds) when the project traffic is added, and
b) An intersection that operates below its level of service standard under the base year conditions experiences an increase in delay of four or more seconds, and
c) The needed improvement of the intersection(s) is not funded in the applicable five-year City Capital Improvement Program from the date of application approval.

The cost of the off-site improvements may be reimbursed by the City if a reimbursement program is established throughout the timeframe of the City of San Mateo's current Traffic Mitigation Program or at the time when the improvement was initially scheduled.

Unsignalized Intersections

The City of San Mateo does not have a level of service standard for unsignalized intersections. Traffic studies typically evaluate whether unsignalized intersections are functioning adequately and whether signalization is warranted using the peak-hour volume signal warrant described in the CA MUTCD.

4.15.2.1 *Project Trip Generation Estimates (Checklist Question a, b)*

The amount of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the

directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific roadway segments and intersection turning movements. These procedures are described further in the following sections.

Trip Generation

Hexagon analyzed the existing and proposed project external (i.e. off-site) vehicle trip generation associated with the proposed project and determined the proposed project would generate fewer external vehicle trips than the existing land use program, meaning total trips associated with existing office uses are currently higher than trips expected from the proposed residential development. The ITE land use types that are applicable to the proposed project are Single-Family Housing (ITE Land Use Code 210) and Multifamily Housing (ITE Land Use Code 221). Based on the ITE average trip generation rates, the project would generate a gross 79 (20 in and 59 out) AM peak hour trips and 99 (61 in and 38 out) PM peak hour trips. Hexagon collected driveway counts in February 2018 and determined that the existing office buildings on site are currently generating 126 (106 in and 20 out) AM peak hour trips and 135 (17 in and 118 out) PM peak hour trips. At the time the existing traffic counts were conducted, the existing office buildings on the project site were partially occupied. Crediting the existing trip generation, the project would generate a net negative 47 trips (-86 in and 39 out) during the AM peak hour and a net negative 36 trips (44 in and -80 out) during the PM peak hour (see Table 4.15-1).

Table 4.15-1: Project Trip Generation – Crediting Driveway Counts

				AM Peak Hour				PM Peak Hour			
Land Use	**Size**	**Unit**	**Daily Trips**	**Peak Rate**	**In**	**Out**	**Total**	**Peak Rate**	**In**	**Out**	**Total**
Proposed Project											
Single Family[1]	28	Unit	264	0.74	5	16	21	0.99	14	69	83
Townhouse[2]	162	Unit	881	0.36	15	43	58	0.44	6	3	9
Total Proposed	190	Units	**1,145**		**20**	**59**	**79**		**61**	**38**	**99**
Existing Use											
Office[3]			(1,305)		(106)	(20)	(126)		(17)	(118)	(135)
Net project Trips			**-160**		**-86**	**39**	**-47**		**44**	**-80**	**-36**

Notes:

All rates are from: Institute of Transportation Engineers, *Trip Generation, 10th Edition*

1. Land Use Code 210: Single-Family Detached Housing (average rates, expressed in trips per dwelling unit)
2. Land Use Code 221: Multifamily Housing (Mid-Rise) (average rates, expressed in trips per dwelling unit)
3. Existing AM and PM peak hour trips based on 2/6/2018 counts. Existing daily trips were estimated.

Trip Distribution and Assignment

Trips generated by the proposed project were distributed to the study network based on the existing travel patterns on the surrounding roadway system and the locations of complementary land. Residential land uses typically generate outbound trips in the morning and inbound trips in the evening, and office land uses typically follow the opposite of residential trip distribution patterns.

The project trips were assigned to the roadway network based on the directions of approach and departure, the roadway network connections, and the location of project driveways. There is a

vehicular bridge across Borel Creek connecting the project site to the office park just north of it. Since the Waters Park Drive driveway is the main driveway for project traffic, all project generated traffic was assigned to use the Waters Park Drive driveway. **(Less Than Significant Impact)**

STUDY INTERSECTIONS | FIGURE 4.15-1

4.15.2.2 *Existing Plus Project Intersection Levels of Service*

The project trips, as represented in the project trip assignment discussed above, were added to existing traffic volumes to obtain existing plus project traffic volumes. Intersection levels of service were evaluated against City of San Mateo LOS standards. The results of the intersection LOS analysis under existing plus project conditions are summarized in Table 4.15-2 below.

Table 4.15-2
Existing Plus Project Conditions Intersection Level of Service

	Study Intersection	Control	Peak Hour	Existing		Existing Plus Project		
				Delay	LOS	Delay	LOS	Incr. in Avg. Delay
1	Delaware St & 19th Avenue	Signal	AM PM	16.1 19.6	B B	15.9 19.8	B B	-0.2 0.2
2	Grant St & Fashion Island Blvd*	Signal	AM PM	25.9 **59.5**	C **E**	25.5 **60.5**	C **E**	-0.4 **1.0**
3	US101 SB Ramps & Fashion Island Blvd	Signal	AM PM	18.1 **81.8**	B **F**	17.2 **83.9**	B **F**	-0.9 **2.1**
4	Norfolk Street & Fashion Island Blvd	Signal	AM PM	**46.4** **72.5**	**D** **E**	**47.1** **73.0**	**D** **E**	**0.7** **0.5**
5	Norfolk Street & Waters Park Dr	Side-Street Stop [1]	AM PM	16.0 18.6	C C	18.2 18.8	C C	2.2 0.2
6	Norfolk Street & Hillsdale Blvd*	Signal	AM PM	42 **47.8**	D **D**	41.9 **47.1**	D **D**	-0.1 **-0.7**
7	US101 SB Ramps & Hillsdale Blvd	Signal	AM PM	12.9 **>120**	B **F**	13.2 **>120**	B **F**	0.3 **1.5**
8	US101 NB Ramps & Hillsdale Blvd*	Signal	AM PM	32.6 **92.1**	C **F**	32.6 **94.6**	C **F**	0.0 **2.5**

Notes:
Signal = signalized, AM = weekday morning peak hour, PM = weekday evening peak hour, LOS = Level of Service
* indicates the intersection level of service is calculated using the HCM 2000 module with the Synchro software. These intersections have unusual lane geometries and/or signal operations that cannot be supported by Synchro HCM 2010 module.
1. Delays and LOS reported for side-street stop-controlled intersections are for the worst approach.
BOLD indicates a substandard level of service.

Source: Hexagon Transportation Consultants, Inc., March 2018.

As shown on Table 4.15-2 above, the intersection level of service results show that the project would not change any existing levels of service, and the following six intersections would continue to operate at a lower level than the City standard of mid-level LOS D (average delay of more than 45 seconds):

- Grant St & Fashion Island Blvd – PM Peak Hour (LOS E)
- US 101 Southbound Ramps & Fashion Island Blvd – PM Peak Hour (LOS F)

- Norfolk St & Fashion Island Blvd – AM & PM Peak Hours (low LOS D and LOS E, respectively)
- Norfolk St & Hillsdale Blvd – PM Peak Hour (low LOS D)
- US 101 Southbound Ramps & Hillsdale Blvd – PM Peak Hour (LOS F)
- US 101 Northbound Ramps & Hillsdale Blvd – PM Peak Hour (LOS F)

Compared against existing conditions using City's intersection impact criteria guidelines, the project would have a less than significant impact on intersection operations under existing plus project conditions, as none of the intersection experience an increase in delay of four or more seconds. The level of service analysis for the unsignalized intersection is provided for information only, as the City does not have a level of service standard for unsignalized intersections. The unsignalized study intersection would continue to operate at LOS C under existing plus project conditions. Since this unsignalized study intersection would operate with little delay under existing plus project conditions, peak hour signal warrants were not checked. **(Less Than Significant Impact)**

4.15.2.3 *Background Plus Project Conditions*

Background plus project conditions were evaluated against background conditions to determine potential project impacts. Background conditions reflect the trips from approved projects in the vicinity that have not yet been constructed/occupied, and therefore reflect conditions anticipated to exist when the subject project is constructed and occupied. The approved and under-construction developments included in this study are listed below:

1. Bay Meadows Phase II Transportation Corridor Plan
2. 1700 South Delaware Street: Demolish commercial land uses and construct 599 residential units, and 26,000 square feet of retail space, and 11,000 square feet of office space.
3. 400 Concar Drive: Demolish commercial uses and construct 277,000 square feet of office space.
4. Hillsdale Shopping Center: Demolish a portion of the current shopping center and construct new retail plus a 10-screen movie theater. Total size increase will be 23,800 square feet.
5. Franklin Templeton Campus Expansion: construct two four-story office buildings totaling 245,260 square feet on the currently vacant parcels west of the existing Franklin Templeton buildings.

For the background plus project scenario, the net new trips generated by the project crediting existing full occupancy were added to the background traffic volumes to derive the background plus project traffic volumes, as shown in Table 4.15-3 below.

Table 4.15-3: Project Trip Generation– Crediting Existing Full Occupancy

				AM Peak Hour				PM Peak Hour			
Land Use	**Size**	**Unit**	**Daily Trips**	**Peak Rate**	**In**	**Out**	**Total**	**Peak Rate**	**In**	**Out**	**Total**
Proposed Project											
Single Family[1]	28	Unit	264	0.74	5	16	21	0.99	14	69	83
Townhouse[2]	162	Unit	881	0.36	15	43	58	0.44	6	3	9
Total Proposed	190	Units	**1,145**		**20**	**59**	**79**		**61**	**38**	**99**
Existing Use											

Office (fully occupied)[3]			(1,604)	1.16	(164)	(27)	(191)	1.15	(30)	(159)	(189)
Net project Trips			**-459**		**-144**	**32**	**-112**		**31**	**-121**	**-90**

Notes:
All rates are from: Institute of Transportation Engineers, *Trip Generation, 10th Edition*
1. Land Use Code 210: Single-Family Detached Housing (average rates, expressed in trips per dwelling unit)
2. Land Use Code 221: Multifamily Housing (Mid-Rise) (average rates, expressed in trips per dwelling unit)
3. Land Use Code 710: General Office Building (average rates, expressed in trips per 1,000 s.f. gross floor area)

The existing buildings on site could be fully occupied without the need for discretionary review by the City of San Mateo. Therefore, background traffic conditions assume the existing office buildings on-site are fully occupied. According to trip generation rates published in the Institute of Transportation Engineers (ITE) manual entitled Trip Generation, 10th Edition, a general office building (Land Use Code 710) with 165,000 square feet would generate 191 AM peak hour trips and 189 PM peak hour trips. Hexagon collected driveway counts in February 2018 and determined that the existing office buildings on site are currently generating 126 AM peak hour trips and 135 PM peak hour trips (See Table 4.15-2). Therefore, under background conditions, the existing buildings at full occupancy would generate a net increase of 65 AM peak hour trips and 54 PM peak hour trips (see Table 4.15-3). As shown on Table 4.15-3 above, the project is expected to generate a net negative 112 trips (-144 in and 32 out) during the AM peak hour and a net negative 90 trips (31 in and -121 out) during the PM peak hour compared to background conditions. **(Less Than Significant Impact)**

4.15.2.4 *Background Plus Project Intersection Level of Service*

As shown in Table 4.15-4, the intersection level of service results show that under background plus project conditions the same six intersections would be deficient as under existing conditions:

- Grant St & Fashion Island Blvd – PM Peak Hour (LOS F)
- US 101 Southbound Ramps & Fashion Island Blvd – PM Peak Hour (LOS F)
- Norfolk St & Fashion Island Blvd – AM & PM Peak Hours (low LOS D and LOS E, respectively)
- Norfolk St & Hillsdale Blvd – PM Peak Hour (low LOS D)
- US 101 Southbound Ramps & Hillsdale Blvd – PM Peak Hour (LOS F)
- US 101 Northbound Ramps & Hillsdale Blvd – PM Peak Hour (LOS F)

Compared against background conditions using the City's intersection impact criteria guidelines, the project would have a less than significant impact on intersection operations under background plus project conditions. The level of service analysis for the unsignalized intersection is provided for information only, as the City does not have a level of service standard for unsignalized intersections. The unsignalized study intersection would continue to operate at LOS C under background plus project conditions. Since this unsignalized study intersection would operate with little delay under background plus project conditions, peak hour signal warrants were not checked. **(Less Than Significant Impact)**

Table 4.15-4
Background Plus Project Conditions Intersection Level of Service

	Study Intersection	Control	Peak Hour	Background		Background Plus Project		
				Delay	LOS	Delay	LOS	Incr. in Avg. Delay
1	Delaware St & 19th Avenue	Signal	AM PM	18.3 23.4	B C	17.8 23.5	B C	-0.5 0.1
2	Grant St & Fashion Island Blvd*	Signal	AM PM	30.1 **97.2**	C **F**	29.0 **100.2**	C **F**	-1.1 **3.0**
3	US101 SB Ramps & Fashion Island Blvd	Signal	AM PM	21.3 **105.7**	C **F**	19.1 **107.7**	B **F**	-2.2 **2.0**
4	Norfolk Street & Fashion Island Blvd	Signal	AM PM	**47.6** **79.5**	**D** **E**	**48.2** **80.0**	**D** **F**	**0.6** **0.5**
5	Norfolk Street & Waters Park Dr	Side-Street Stop [1]	AM PM	17.5 20.9	C C	18.2 18.8	C C	0.7 -2.1
6	Norfolk Street & Hillsdale Blvd*	Signal	AM PM	42.7 **48.0**	D **D**	42.2 **46.7**	D **D**	-0.5 **-1.3**
7	US101 SB Ramps & Hillsdale Blvd	Signal	AM PM	41.3 **>120**	D **F**	42.2 **>120**	D **F**	0.9 **1.3**
8	US101 NB Ramps & Hillsdale Blvd*	Signal	AM PM	44.5 **106.8**	D **F**	44.5 **109.0**	D **F**	0.0 **2.2**

Notes:
Signal = signalized, AM = weekday morning peak hour, PM = weekday evening peak hour, LOS = Level of Service
* indicates the intersection level of service is calculated using the HCM 2000 module with the Synchro software. These intersections have unusual lane geometries and/or signal operations that cannot be supported by Synchro HCM 2010 module.
1. Delays and LOS reported for side-street stop-controlled intersections are for the worst approach.
BOLD indicates a substandard level of service.

Source: Hexagon Transportation Consultants, Inc., March 2018.

Vehicle Miles Traveled

Pursuant of SB 743, the Governor's Office of Planning and Research (OPR) published the finalized Updates to the CEQA Guidelines in November 2017. The guidelines stated that Level of Service will no longer be considered to be an environmental impact under CEQA and considers vehicle-miles-travelled (VMT) the most appropriate measure of transportation impact. Cities have two years to adopt the new procedures. In accordance with SB 743, daily VMT for projects in San Mateo versus the average of the San Francisco Bay area are presented based on the Metropolitan Transportation Commission (MTC) travel demand forecast model. The Year 2020 Plan Bay Area model forecasted daily VMT is 13.45 miles per resident in this area of San Mateo (Traffic Analysis Zone 274), while the San Francisco Bay Area average daily VMT is 15.0 miles per resident. Given that no standard approach or guidelines have been adopted by the City of San Mateo, the VMT presented in this report is for information only.

Transportation Demand Measures

Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle trips to help relieve traffic congestion, parking demand, and air pollution. The purpose of the TDM Plan is to propose trip reduction strategies with the goal of reducing overall vehicular trip making activity in the area. According to the City of San Mateo's Sustainable Streets Final Plan (February 2015), a TDM plan with a trip reduction target of 10 percent is recommended for all new development within city limits that include either more than six residential units or more than 10,000 square feet of commercial space. The TDM plan prepared for the proposed residential development in order to propose effective and appropriate TDM measures, is based on the project's size, location, and land use. For details on the TDM plan, please refer to Chapter 6 of the traffic study (See Appendix H).

4.15.2.5 *Cumulative Conditions*

Cumulative 2030 traffic conditions were evaluated for the AM and PM peak hours. The 2030 AM and PM peak hour traffic volumes at eleven signalized study intersections were obtained from the City of San Mateo General Plan 2030 model, and adjusted using existing traffic volumes. The traffic growth at each study intersection reported in the current General Plan was first linearly proportioned to account for only the remaining years until year 2030. The traffic growth was then added onto the existing intersection volumes. Hexagon has determined that the proposed project is not included in the Year 2030 forecasts. A cumulative plus project scenario was evaluated by adding onto cumulative traffic volumes the trips generated by the proposed project. Cumulative project impacts were evaluated by comparing the cumulative plus project traffic conditions to the cumulative traffic conditions. The results of the level of service calculations show that under 2030 cumulative conditions, the following six intersections would be deficient (see Table 4.15-5):

- Grant St & Fashion Island Blvd – PM Peak Hour (LOS F)
- US 101 Southbound Ramps & Fashion Island Blvd – PM Peak Hour (LOS F)
- Norfolk St & Fashion Island Blvd – AM & PM Peak Hours (LOS E and LOS F, respectively)
- Norfolk St & Hillsdale Blvd – AM & PM Peak Hours (low LOS D)
- US 101 Southbound Ramps & Hillsdale Blvd – PM Peak Hour (LOS F)
- US 101 Northbound Ramps & Hillsdale Blvd – AM & PM Peak Hours (LOS D and LOS F, respectively)

The level of service analysis for the unsignalized intersection is provided for information only, as the City does not have a level of service standard for unsignalized intersections. The unsignalized study intersection would continue to operate at LOS C under 2030 cumulative conditions. Since this unsignalized study intersection would operate with little delay under cumulative conditions, peak hour signal warrants were not checked.

As shown on Table 4.15-5 below, the same six intersections would be deficient under Cumulative Plus Project conditions. The increase in project traffic would not generate an intersection impact on its own, based on City of San Mateo intersection impact criteria. **(Less Than Significant Cumulative Impact)**

Table 4.15-5
Cumulative Conditions Intersection Level of Service Summary

Study Intersection		Control	Peak Hour	Year 2030 GP Conditions[1]		Year 2030 GP + Project Conditions		
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Avg. Delay
1	Delaware St & 19th Avenue	Signal	AM PM	22.9 33.6	C C	22.2 33.8	C C	-0.7 0.2
2	Grant St & Fashion Island Blvd*	Signal	AM PM	42.0 **114.9**	D **F**	40.3 **118.0**	D **F**	-1.7 **3.1**
3	US101 SB Ramps & Fashion Island Blvd	Signal	AM PM	33.6 **103.8**	C **F**	28.3 **105.8**	C **F**	-5.3 **2.0**
4	Norfolk Street & Fashion Island Blvd	Signal	AM PM	**63.8** **79.8**	**E** **E**	**64.5** **80.3**	**E** **F**	**0.7** **0.5**
5	Norfolk Street & Waters Park Dr	Side-Street Stop	AM PM	19.1 23.1	C C	20.4 20.3	C C	1.3 -2.8
6	Norfolk Street & Hillsdale Blvd*	Signal	AM PM	45.3 **50.6**	D **D**	44.0 **49.3**	D **D**	-1.3 **-1.3**
7	US101 SB Ramps & Hillsdale Blvd	Signal	AM PM	39.9 **>120**	D **F**	40.7 **>120**	D **F**	0.8 **1.3**
8	US101 NB Ramps & Hillsdale Blvd*	Signal	AM PM	50.1 **105.6**	**D** **F**	50.0 **107.8**	**D** **F**	**-0.1** **2.2**

Notes:
Signal = signalized, AM = weekday morning peak hour, PM = weekday evening peak hour, LOS = Level of Service
* indicates the intersection level of service is calculated using the HCM 2000 module with the Synchro software. These intersections have unusual lane geometries and/or signal operations that cannot be supported by Synchro HCM 2010 module.
1. Year 2030 conditions intersection level of service results are based on volume growths published in the City of San Mateo General Plan Update - Revised Draft Environmental Impact Report.
BOLD indicates a substandard level of service.
Source: Hexagon Transportation Consultants, Inc., March 2018.

4.15.2.6 *Other Transportation Impacts (Checklist Question c, d, e)*

Air Traffic Patterns

The project site is approximately six miles southeast from the San Francisco International Airport and 3.2 miles northwest of San Carlos Airport. The project would not affect air traffic patterns in the vicinity of the site, refer to discussion in *Section 4.8 Hazards and Hazardous Materials*. **(No Impact)**

Site Access and Circulation

The site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, delays, vehicle queues, truck access, pedestrian and bicycle access.

The site plan shows that the new proposed residential development would utilize the existing connection of Waters Park Drive to Norfolk Street. The existing bridge over Borel Creek would be for emergency vehicle access only. The site plan shows that there would be a mini-roundabout at the site entrance and then two access roads that would circle around the site. The project is estimated to generate 79 trips during the AM peak hour and 99 trips during the PM peak hour. That is less than two cars every minute entering or exiting at the Waters Park intersection with Norfolk Street. The project traffic is less than the existing office buildings and could be easily accommodated at the intersection.

The proposed site plan shows that ground level garages would be provided for each building connecting with to 26-foot wide circular road. The proposed width is adequate for two-way circulation and would provide sufficient room for vehicles to back out of the garages. The travel lane around the roundabout at the site entrance is shown to be 12 feet wide, which is adequate for vehicles to maneuver and turn around without operational issues. The site plan shows good circulation through the project site. The site plan shows that there would be a drop-off/pick-up area on the northeast corner of the building at the entrance of the project site. This could accommodate the shuttle bus and rideshare services.

The project site plan shows one proposed trash enclosure located at the southwest corner of the project site. Garbage truck access to the proposed trash enclosure would be adequate. Garbage trucks would use the circular drive to turn around after collecting garbage. Overall, garbage truck access and circulation would be adequate. **(Less than Significant Impact)**

Emergency Vehicle Access and Circulation

Emergency response vehicles would be able to access the project site from the main access on Waters Park Drive or from the bridge over Borel Creek. The minimum width of the internal drive aisle through the project site would be 26 feet wide, which is adequate for emergency vehicle access and circulation. **(Less Than Significant Impact)**

4.15.2.7 *Impacts to Pedestrian, Bicycle and Transit Facilities (Checklist Question f)*

The roadways in the vicinity of the project site include sidewalks that provide adequate access for pedestrians walking to and from the site. The proposed project would build sidewalks along both sides of the inner driving circle and add crosswalks at each approach of the roundabout at the site, which would provide pedestrian connections between the project site and adjacent roadways. Within the immediate vicinity of the project site, crosswalks are lacking across the north and south legs at the Norfolk Street and Waters Park Drive intersection, and across the south leg at the Norfolk Street and Fashion Island Boulevard intersection. The project proposes to add new crosswalks across the north and south legs at the Norfolk Street and Waters Park Drive intersection to provide a better connection between the project site to the nearby bus stops.

Within the project vicinity, a Class I bicycle path – the Foster City Pedway/Bikeway is located east of the project site. Class II bicycle lanes exist on Norfolk Street between Crio Avenue and Fashion Island Boulevard, on 19th Avenue/Fashion Island Boulevard east of Delaware Street, on Grant Street between 19th Avenue and Concar Drive, and on Concar Drive between Grant Street and Delaware Street. Hillsdale Boulevard between Edison Street and Norfolk Street, as well as Pacific Boulevard

north of 42nd Avenue, are both City-designated Class III bike routes. With the existing bike facilities and the proposed improvements, the bike trips resulting from the project would be accommodated by the bicycle facilities in the area.

As discussed in *Section 4.15.1.2*, the project site is served by two bus routes plus shuttle service, and there are bus stops within close proximity of the project site. In addition, the Hillsdale Caltrain station is located approximately 1.5 miles southwest of the project site, which is about a 10- to 15-minute bike ride. There is also a free Caltrain shuttle that stops at the project site. There are continuous pedestrian facilities connecting the project site to the various bus stops and the Caltrain station. Compared to the existing office buildings on site, it is not anticipated that the project would generate additional transit ridership on the buses, the Caltrain shuttles, and Caltrain. **(Less than Significant Impact)**

4.15.2.8 *Operational Transportation Issues Not Covered Under CEQA*

Impacts to Parking

Vehicle Parking

The required parking supply is determined using the parking rates specified in the City Municipal Code Section 27.64.160 (1) (a) & (d). For a single-family dwelling under 3,000 square feet, the City Code requires 2.0 garage spaces per unit. For multiple-family dwelling developments, the City Code requires 1.8 resident spaces per two-bedroom unit, and 2.0 resident spaces per three-bedroom unit, plus 0.2 visitor spaces per unit. Based on the site plan, the project would include 104 two-bedroom units, 58 three or more-bedroom units, and 28 single-family units, which requires a total of 413 parking spaces (380 spaces for residents and 33 spaces for visitors). The project proposes to provide a total of 425 spaces with 380 assigned spaces for residents and 43 standard parking spaces plus two accessible spaces for visitors, which would meet the city's parking requirement. **(Less than Significant Impact)**

Bicycle Parking

The Municipal Code Section 27.64.262 specifies the required short-term and long-term bicycle parking spaces for various land uses. Based on the code, each long-term bicycle parking space should consist of a locker or a rack located within a locked enclosure providing protection for each bicycle from theft, vandalism and weather. Short-term bicycle parking must be along the project frontage and within 50 feet of the main entrance to the building or commercial use.

For residential use, the City Code requires 0.10 short-term and 1.25 long-term spaces per two-bedroom unit, and 0.15 short-term and 1.5 long-term spaces per three or more-bedroom unit. The City Code does not require bike sparking spaces for single-family units. This yields a minimum requirement of 24 short-term and 261 long-term bicycle parking spaces. The project proposed to provide 261 bicycle parking spaces for residents and 24 spaces for guests. The site plan does not show the location of the short-term parking spaces. It is recommended to provide short-term parking spaces throughout the site for easy access by visitors. **(Less than Significant Impact)**

4.15.3 Conclusion

Implementation of the General Plan policies and Standard Conditions of Approval would reduce transportation and traffic impacts to a less than significant level. **(Less than Significant)**

4.16 UTILITIES AND SERVICE SYSTEMS

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Assembly Bill 939

Assembly Bill 939 (AB 939) established the California Integrated Waste Management Board (now CalRecycle) and required all California counties to prepare integrated waste management plans. AB 939 required all municipalities to divert 50 percent of the waste stream by the year 2000.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupant.

Local

City of San Mateo General Plan

Applicable General Plan policies related to utilities and service systems include, but are not limited to, the following listed below.

Policies	Description
LU 4.4	Seek to ensure a safe and predictable water system for existing and future development by taking the following actions: 1. As a high priority, work with California Water Company and Estero Municipal Improvement District and adjacent jurisdictions to develop supplemental water sources and conservation efforts. 2. Strongly encourage water conservation by implementing pro-active water conservation methods, including requiring all new development to install low volume flush toilets, low-flow shower heads, and utilize drip irrigation while promoting high-efficiency washing machines and establishing an education program to improve water conservation practices. 3. Investigate the feasibility of developing reclaimed water facilities or ground water or treating stormwater runoff that will enable reuse of water for irrigation purposes, freeing comparable potable water supplies for other uses.

Policies	Description
LU 4.7	Provide a sewer system which safely and efficiently conveys sewage to the waste water treatment plant. Implement the Sewer System Management Plan (SSMP) to ensure proper maintenance, operations and management all parts of the wastewater collection system.
LU 4.16	Seek to ensure adequate gas, electric, and communication system to serve existing and future needs while minimizing impacts and existing and future residents by taking the following actions: 1. Underground electrical and communication transmission and distribution lines in residential and commercial areas as funds permit. 2. Require all new developments to underground lines and provide underground connections when feasible. 3. Balance the need for cellular coverage with the desire to minimize visual impacts of cellular facilities, antennas, and equipment shelters.
LU 4.28	Seek to ensure that the California Water Service Company and the Estero Municipal Improvement District provide and maintain a water supply and distribution system which provides an adequate static pressure to deliver a minimum fire hydrant flow of 2,500 gallons per minute to all areas of the City, except where a lesser flow is acceptable as determined by the Fire Chief. Ensure that new development does not demand a fire flow in excess of that available.
LU 4.31	Continue to support programs to reduce solid waste materials in landfill areas in accordance with State requirements.
LU 4.32	Support programs to recycle solid waste in compliance with State requirements. Require provisions for onsite recycling for all new development.
LU 8.5	Implement actions to achieve Goal 8e which states: Reduce citywide gross water consumption per capita to 102 gallons/day. Reduce the residential per capita to 70 gallons/day. Potential supportive actions include: 1. Increase costs for residential and commercial waste collection and use increased waste collection revenue to provide waste reduction incentives. 2. Mandate recycling. 3. Require modifications within existing buildings to accommodate recycling bins. 4. Require mandatory segregation of recyclables for all public (on-street, parks, public buildings) waste collection. 5. Set aggressive waste reduction goals for all new development. 6. Provide expanded waste reduction outreach and support for local businesses and residential customers. 7. Support backyard composting while maintaining public health safeguards.
LU 8.6	Increase measured waste diversion to 50 percent in 2020 and maximum diversion 90 percent by 2050 by mandating recycling, setting aggressive waste reduction goals for all new development and increasing costs for residential and commercial waste collection then using increased waste collection revenue to provide waste reduction incentives.
LU 8.7	Establish a partnership with California Water Service (CWS), Bay Area Water Supply Conservation Agency and other mid-peninsula cities to promote the water reduction strategies that are offered and to create an outreach program that will help inform residence and businesses of increase costs and the need for conservation efforts.

4.16.1.2 *Existing Conditions*

The project site is located in a developed area within the City of San Mateo and the existing office buildings are currently served by existing phone, electrical, water, stormwater, wastewater, and solid waste service systems. Natural gas and electrical service is provided by PG&E.

Water Service

The California Water Service Company (Cal Water) is the water service provider for the project site. The City of San Mateo is located within Cal Water's Mid-Peninsula District. This district includes of the cities of San Mateo, San Carlos, and adjacent unincorporated areas of San Mateo County. Cal Water's customers within the Mid-Peninsula District are mostly comprised of single-family residences (88 percent) but also include multi-family residences (two percent), commercial businesses (9.7 percent), and industrial facilities (0.3 percent).

Cal Water purchases water from the San Francisco Public Utilities Commission (SFPUC) to meet the City's water demand. Water is received (by cities within the Mid-Peninsula District, including the City of San Mateo) from the SFPUC through eight metered connections with four SFPUC transmission lines. SFPUC water is predominantly from the Sierra Nevada, delivered through the Hetch Hetchy Water System, but also includes treated water produced by SFPUC from its local watersheds and facilities in Alameda and San Mateo counties.

Cal Water's 2015 Urban Water Management Plan (UWMP) forecasts that water supplies will be available to meet the City's projected future water demands during normal and wet years until 2040, based on general population growth estimates and supplier projections. During single- and multiple-drought years, the City expects reductions in available supply from the SFPUC. This decrease in imported water is anticipated to be made up through implementation of drought-year water conservation measures.

Cal Water is expanding current conservation programs and developing new programs for its 24 service districts (including the Mid-Peninsula District) based on Senate Bill No. 7 (SB 7) which mandated (in November 2009) a statewide 20 percent reduction in per capita urban water use by 2020, as well as recent decisions by the California Public Utilities Commission (CPUC) requiring water utilities to adopt conservation programs and rate structures designed to achieve reductions in per capita water use. To achieve the state's reduction targets, Cal Water set 2015 and 2020 per capita targets (for water use) to 95 percent of the 2015 and 2020 targets for the San Francisco Bay hydrologic region (a State-approved method to attain the SB 7 goal). Based on this method, the Mid-Peninsula District's target for 2015 was 129 gallons per capita per day (gpcd) and the 2020 target is 124 gpcd. In 2015, the Mid-Peninsula (San Mateo and San Carlos) system's customer demand was 85 gpcd, which meets District's goal set for both 2015 and 2020. Additionally, Cal Water has developed a water shortage contingency plan consisting of a four-stage rationing plan that includes both voluntary and mandatory measures. The measures include public information campaign, public school educational programs, changes to water rates and mandatory reductions in water use.

Sanitary Sewer/Wastewater Treatment

The City of San Mateo Public Works Department Environmental Services Division provides oversight of the City's sanitary sewer collection system, including Wastewater Treatment Plant

(WWTP) serving more than 130,000 people, 236 miles of collection system mainlines, 5,555 manholes, and 25 sewer lift stations. San Mateo's WWTP is a jointly owned facility. San Mateo owns approximately 75 percent and Foster City owns approximately 25 percent of the facility. San Mateo's 75 percent facility ownership is jointly used by San Mateo and three partners which include: the Town of Hillsborough (4.1 percent), Crystal Springs County Sanitation District (five percent), the County of San Mateo (0.4 percent), and the City of San Mateo (65.5 percent).

Wastewater is collected by the City's sanitary sewer system and is conveyed to the WWTP for treatment and disposal. The San Mateo WWTP has an average dry weather (ADWF) design capacity of 15.7 million gallons per day (mgd) and a peak wet weather capacity of approximately 40 mgd.[24] The current ADWF is approximately 11.6 mgd. The ADWF is expected to increase directly with the increase in population within the service area, resulting in an ADWF of 13.9 mgd by the year 2035. The influent loadings are expected to increase similarly. Therefore, expansion of permitted capacity for dry conditions is not needed over the 20 year planning period.[25]

Wastewater from the project site would be directed to six-inch sanitary sewer lines and would be connected to the existing line in the neighbor's property.

Storm Drainage

The City of San Mateo Public Works Department operates and maintains the storm drainage system in the City. Stormwater from the site typically flows into the municipal storm drain system which likely discharge directly into nearby Seal Slough. The project site is within the San Mateo Creek drainage basin, which drains directly to the San Francisco Bay. The City's storm drain system has sufficient capacity to accommodate storm drainage from the existing development.

Solid Waste

Solid waste collection and recycling services for residents and businesses in San Mateo are provided by Recology San Mateo County. Once collected, solid waste and recyclables are transported to the Shoreway Environmental Center for sorting. After the solid waste is collected and sorted at the San Carlos Transfer Station, non-recyclable wastes is transported to the Corinda Los Trancos (Ox Mountain) Landfill, located in Half Moon Bay. The Ox Mountain landfill is permitted by the CalRecycle to receive 13,326 cubic yards per day or 4.9 million cubic yards per year. The landfill's maximum capacity is 69 million cubic yards. The remaining capacity at this facility (as of December 2015) was 22,180,000 cubic yards. The facility remains active and the City is working on extending the existing contract that expires at the end of 2019. Prior to the landfill reaching its capacity, either Los Trancos Canyon is anticipated to be expanded further or nearby Apanolio Canyon will be opened for fill. The City will implement programs to reduce solid waste materials in landfill areas, which would ensure continued compliance with state requirements.

[24] California Regional Water Quality Control Board San Francisco Bay Region. *Administrative Liability for City of San Mateo, San Mateo County*. Order No. R2-2009-0015. 2009.
[25] City of San Mateo. Estero Municipal Improvement District. *Wastewater Treatment Plant. 20-year Master Plan (2035)*. August 2013.

4.16.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	1,2,3,4
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1,2,3
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1,2,3,4
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐	1,2,3
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	1,2,3
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1,2,3
g) Comply with federal, state, and local statutes and regulations related to solid waste.	☐	☐	☒	☐	1,2,3

4.16.2.1 *Water Service Impacts (Checklist Question b, d)*

The project proposes 190 residential units, which fall below the 500 dwelling unit threshold, established by Senate Bill 610 for a water supply assessment by a local provider. The project site currently uses approximately 47.22 million gallons per year of water (including indoor and outdoor use).[26] It is estimated that the proposed residential project would use approximately 20.2 million gallons per year of water (including indoor and outdoor use),[27] resulting in a net decrease in water demand of approximately 26.4 million gallons/year.

[26] ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 7.2, Page 15 of 18.
[27] ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 7.2, Page 36 of 40.

Since the project would result in a net decrease in water demand, the proposed development would have a less than significant effect on water services. The project would not require construction of new or expanded water supply facilities. **(Less than Significant Impact)**

4.16.2.2 *Wastewater Services Impacts (Checklist Question a, e)*

Pursuant to the Federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the RWQCB regulates wastewater discharges to surface waters through the NPDES program. Wastewater permits contain specific requirements that limit the pollutants it discharges. The RWQCB routinely inspects treatment facilities to ensure permit requirements are met.

Sewage from development on the project site would be treated at the WWTP in accordance with the existing NPDES permit. The existing office uses at the project site currently generate approximately 29.27 million gallons per year of wastewater.[28] The proposed development would generate approximately 12.38 million gallons per year of wastewater, [29] which would reduce the average base wastewater flow by 16.89 million gallons per year.

Compared to existing conditions, the proposed project would decrease the wastewater generated onsite and, therefore, would not require the construction of new wastewater treatment facilities or the expansion of existing facilities. Therefore, no impact would occur**. (Less than Significant Impact)**

4.16.2.3 *Storm Drainage Impacts (Checklist Question c)*

The City of San Mateo Public Works Department operates and maintains the storm drainage system in the City. As discussed in *Section 4.9, Hydrology and Water Quality* of this Initial Study, the project site is currently developed with a commercial office park, including 310,816 square feet of impervious surfaces and 173,663 square feet of pervious surfaces. The proposed project would increase the impervious surfaces onsite to 333,235 square feet, thereby increasing the impervious surface by approximately 22,419 square feet or five percent, resulting in an increase in stormwater runoff.

As discussed *in Section 4.9, Hydrology and Water Quality*, with the implementation of the SWPPP, conditions of approval to minimize runoff, and drainage standards implemented by the City, the project would not generate significant volumes of stormwater flows into the existing drainage system. In addition, stormwater treatment planters are proposed as part of the landscaping area and depressed treatment gardens would be dispersed throughout the site to capture and clean stormwater runoff from impervious areas of the site. Therefore, runoff generated on the site would not exceed the capacity of the City' existing storm water drainage system. **(Less than Significant Impact)**

[28] Existing sewer generation for the proposed project is equal to the projected indoor water use of 29.2745 million gallons per year. (Source: ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 7.2, Page 15 of 18)

[29] Project sewer generation for the proposed project is based on the projected water use of 12.37931 million gallons per year. (Source: ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 7.2, Page 36 of 40)

4.16.2.4 *Impacts to Solid Waste and Landfills (Checklist Question f, g)*

Solid waste collection and recycling services for residents and businesses in San Mateo are provided by Recology San Mateo County. The City's estimated current rate of disposal is approximately 4.2 pounds of waste per resident per day. The project site currently generates approximately 1,225 pounds (0.61 tons) of landfilled solid waste per day.[30] It is estimated that the proposed project would generate approximately 592 pounds (0.30 tons) of landfilled solid waste per day,[31] resulting in a net decrease in solid waste generation of approximately 633 pounds (0.32 tons) per day.

In addition, large amounts of construction waste would be generated during construction and demolition activities. At least 50 percent of this construction waste will be recycled, in compliance with the City's Construction and Demolition Debris Ordinance. Through recycling measures proposed during construction and post-construction periods, the project would not adversely affect the City's compliance with the waste diversion requirements under state law.

Since the proposed project would reduce the solid waste generated from the site, it would have a less than significant impact on the landfill capacity. **(Less Than Significant Impact)**

4.16.3 Conclusion

The proposed project would not result in an exceedance of capacity of any of the City of San Mateo's existing utility systems. Existing sewer, water, and drainage systems would be utilized by the proposed project, and no new facilities would need to be developed to accommodate the project. Therefore, the project would not result in significant impacts to utilities and service systems. **(Less Than Significant Impact)**

[30] ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 8.2, Page 17 of 18. 153.18 tons/year equals 0.61 tons/day, based on a 250-day year for office use.

[31] ECORP Consulting Inc. *Waters Park Residential– City of San Mateo Greenhouse Gas Emissions Assessment*. April 2018. Table 8.2, Page 38 of 40. 108.12 tons/year equals 0.3 tons/day, based on a 365-day year for residential use.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	1-21
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐	1-21
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-21

4.17.1 Project Impacts (Checklist Question a)

As discussed in the individual environmental resource sections, the proposed project would not substantially degrade the quality of the environment with implementation of identified mitigation measures. As discussed in *Section 4.4 Biological Resources*, the project would implement mitigation measure MM BIO-1.1 to-1.4 to avoid and/or reduce impacts to nesting birds (if present) to a less than significant level. While unlikely, there is a potential for buried archaeological resources on site. Implementation of conditions of approval as discussed in *Section 4.5 Cultural Resources* would avoid and/or reduce impacts to cultural resources (if present) to a less than significant level. **(Less Than Significant Impact with Mitigation Incorporated)**

4.17.2 Cumulative Impacts (Checklist Question b)

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In addition, under Section 15152(f) of the CEQA Guidelines, where a lead agency has determined that a cumulative effect has been adequately addressed in a prior EIR, the effect is not

treated as significant for purposes of later environmental review and need not be discussed in detail. The City of San Mateo General Plan EIR was prepared in 2010 which estimates buildout to the year 2030. This cumulative analysis is based upon the General Plan model buildout assumptions for the City of San Mateo, which allows for 48,360 dwelling units and 30,657,198 square feet of non-residential uses by the year 2030.

Because criteria air pollutant and GHG emissions would contribute to regional and global emissions of such pollutants, the identified thresholds developed by BAAQMD and used by the City of San Mateo were developed such that a project-level impact would also be a cumulatively considerable impact. Cumulative construction air quality impacts were disclosed in *Section 4.3* as not significant. The discussion of project criteria pollutant impacts presented in *Section 4.3* also reflects cumulative conditions, and the project would not contribute to significant cumulative impacts. The project's contribution to cumulative climate change impacts was presented in *Section 4.7* as less than cumulatively considerable. Therefore, the proposed project would not make a substantial contribution to cumulative air quality or GHG emissions impacts.

With the implementation of mitigation measures and conditions of approval, residential development on the site would not result in significant geology and soils or hydrology and water quality impacts and would not contribute to cumulative impacts to these resources, as these are specific to the site, and do not have the potential to contribute to or combine with localized, specific conditions on other development sites across the City over the planning horizon of the General Plan. Also, the project would not impact agricultural and forest resources or mineral resources and, therefore, the project would not contribute to a significant cumulative impact on these resources. **(Less Than Significant Cumulative Impact)**

Biology

The proposed project, in conjunction with cumulative projects, would not result in the loss of sensitive habitat. The project proposes the removal of 233 trees. The project proposes to plant 245 new trees as part of project's landscaping, which would replace removed trees at a minimum of 1:1 ratio. For this reason, the project would be consistent with the City's policy regarding tree removal and replacement, and would not result in significant impacts to trees. Pre-construction nesting bird surveys are required as mitigation, therefore, the project would have a less than significant impact on migratory birds. **(Less Than Significant Cumulative Impact)**

Hydrology

The project would generate surface runoff during construction. Conditions of approval have been included in the project to reduce potential construction-related water quality impacts. Since these project impacts would be temporary and would be mitigated, the cumulative impacts on water quality would be less than significant. **(Less Than Significant Cumulative Impact)**

Noise

Typically, a three (3) dBA noise increase would be perceivable by sensitive receptors. In order for traffic noise to increase by 3 dBA, traffic volumes would need to double along a local roadway. As discussed further in *Section 4.16 Transportation/Traffic*, vehicle trips of the proposed project traveling to and from the site would generate a net negative 47 trips during the AM peak hour and net

negative 36 trips during the PM peak hour, and therefore, would not increase traffic noise levels on the surrounding roadway network, and would not therefore contribute to cumulative roadway noise impacts. **(Less Than Significant Cumulative Impact)**

Traffic

Cumulative traffic conditions are discussed in *Section 4.15.* Under cumulative conditions, the project would contribute to the growth in cumulative traffic demand as shown in Table 4.15-5. The project has negative trip generation compared to existing driveway counts, therefore, many intersections have negative delay. The only issue is the change in directionality between the current office trips and the proposed residential trips. The increase in project traffic would not generate an intersection impact on its own based on City of San Mateo intersection impact criteria. Therefore, cumulative traffic impact would be less than significant. **(Less than Significant Cumulative Impact)**

4.17.3 Direct or Indirect Adverse Effects on Human Beings (Checklist Question c)

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air pollutants, geological hazards, hazardous materials, and noise. Implementation of identified mitigation measures and conformance with existing regulations would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings are anticipated. **(Less Than Significant Impact with Mitigation Incorporated)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

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