APPENDIX B

Initial Study

INITIAL STUDY
770 WOOLSEY STREET PROJECT
PLANNING DEPARTMENT CASE NO. 2017-012086ENV

Contents

TABLE

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ABAG	Association of Bay Area Governments
air district	Bay Area Air Quality Management District
ADA	Americans with Disabilities Act
bgs	below ground surface
building department	San Francisco Department of Building Inspection
California register	California Register of Historical Resources
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	State of California Division of Occupational Safety and Health Administration
CEQA	California Environmental Quality Act
CO	carbon monoxide
dBA	A-weighted decibel
DDD	dichloro-diphenyl-dichloroethane
DDE	dichloro-diphenyldichloro-ethylene
DDT	dichloro-diphenyl-trichloroethane
EPA	United States Environmental Protection Agency
ERO	Environmental Review Officer
GHG	greenhouse gases
health department	San Francisco Department of Public Health
Ldn	day-night sound level
Leq	equivalent sound level
MBTA	Migratory Bird Treaty Act
MTC	Metropolitan Transportation Commission
Muni	San Francisco Municipal Railway
NO_2	nitrogen dioxide
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
Phase I Site Assessment	site assessment
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
ROG	reactive organic gases
fire department	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency

Acronym/Abbreviation	Definition
SFPUC	San Francisco Public Utilities Commission
SO_2	sulfur dioxide
TAZ	transportation analysis zone
TNC	transportation network company
TPH-d	Total petroleum hydrocarbons as diesel
TPH-g	Total petroleum hydrocarbons as gasoline
transportation authority	San Francisco County Transportation Authority
VMT	vehicle miles traveled

A. Project Description

The project description for the 770 Woolsey Project is included as Chapter 2, Project Description, in the environmental impact report (EIR) to which this initial study is appended.

B. Project Setting

The project setting for the proposed project is included as Chapter 2, Project Description, in the EIR to which this initial study is appended.

C. Compatibility with Existing Zoning and Plans

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the San Francisco planning code or zoning map, if applicable.	☒	☐
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.	☒	☐
Discuss any approvals and/or permits from city departments other than the planning department or the Department of Building Inspection, or from regional, state, or federal agencies.	☒	☐

This section discusses potential conflicts of the proposed project with applicable local plans and policies, as well as potential conflicts with regional plans and policies, as applicable. Conflicts with existing plans and policies do not, in and of themselves, indicate a significant physical environmental effect. To the extent that adverse physical environmental impacts may result from such inconsistencies, these impacts are analyzed in this initial study under the specific environmental topic sections below in Section E, Evaluation of Environmental Effects, and Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, of the EIR.

1. San Francisco Planning Plans and Policies

SAN FRANCISCO GENERAL PLAN

The San Francisco General Plan (general plan) establishes objectives and policies to guide land use decisions related to the physical development of San Francisco. It is comprised of 10 elements, each of which addresses a particular topic that applies citywide: air quality; arts; commerce and industry; community facilities; community safety; environmental protection; housing; recreation and open space; transportation; and urban design.

The housing element contains objectives and policies that address the city's growing housing demand, focusing on strategies that can be accomplished with the city's limited land supply. In general, the housing element supports projects that increase the city's housing supply (both market-rate and affordable housing), especially in areas that are close to the city's job centers and are well served by transit. The proposed project would construct approximately 62 residential units, including 12 affordable units, and would not conflict with any objectives or policies in the housing element.

The proposed project would not obviously or substantially conflict with any goals, policies, or objectives of the general plan, with the exception of some policies included in the urban design element, as discussed below.

One general plan element expressly applicable to planning considerations associated with the proposed project is the Urban Design Element. Objectives of the general plan's urban design element that are applicable to the proposed project include emphasis of the characteristic pattern, which gives to the city and its neighborhood an image, sense of purpose, and a means of orientation; conservation of resources that provide a sense of nature, continuity with the past, and freedom from overcrowding; and moderating major new development to complement the city pattern, the resources to be conserved, and the neighborhood environment. The proposed project would demolish the existing structures at the site. The property is eligible for listing in the California register due in part to its historical significance with regard to the Italian farming community in the Portola neighborhood and its significance as a rare surviving property type that was once common in the Portola and Excelsior neighborhoods of San Francisco. The project sponsor proposes to rebuild the boiler house and greenhouse numbers 1 and 2 in the original size and location as part of the publicly accessible open space, using salvaged materials from the existing buildings on the project site as feasible. However, reconstruction of greenhouses 1 and 2 and the boiler house may not meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. For these reasons, the proposed project may be inconsistent with policy 2.4 of the urban design element, which calls for the preservation of notable landmarks and areas of historic, architectural, or aesthetic value. The physical environmental impacts that could result from this conflict are discussed in EIR Section 3.A, Historic Architectural Resources, which evaluates impacts on historic architectural resources.

The compatibility of the proposed project with general plan policies that do not relate to physical environmental issues will be considered by decision-makers as part of their decision whether to approve or disapprove the proposed project. Any potential conflicts identified as part of the process would not alter the physical environmental effects of the proposed project.

SAN FRANCISCO PLANNING CODE

The San Francisco Planning Code, which incorporates by reference the city's zoning maps, governs permitted uses, densities, and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless: (1) the proposed project complies with the planning code, (2) an allowable exception or variance is granted, or (3) legislative amendments to the planning code are included and adopted as part of the proposed project.

LAND USE

The project site is located in the RH-1 (Residential House One-Family) zoning district. As stated in planning code section 209.1, the RH-1 zoning districts "are occupied almost entirely by single-family houses on lots 25 feet in width, without side yards. Floor sizes and building styles vary, but tend to be uniform within tracts developed in distinct time periods. Though built on separate lots, the structures have the appearance of small-scale row housing, rarely exceeding 35 feet in height. Front setbacks are common, and ground level open space is generous. In most cases the single-family character of these districts has been maintained for a considerable time." The RH-1 zoning district allows up to 1 dwelling unit per lot and up to 1 unit per 3,000 square feet of lot area with conditional use approval.

The proposed project would require a conditional use authorization (planning code sections 303 and 304) for a planned unit development (PUD) from the planning commission to allow for (1) development of more than one dwelling unit not meeting the technical requirements of section 121, (2) exceptions from driveway width and street frontage controls (section 144), and (3) increase in dwelling unit density in the RH-1 zoning district (section 209.1).

Planning code section 304 permits a PUD as a conditional use in all residential districts for properties that are larger than 0.5 acre in size. Planning code section 304(d)(4) allows for dwelling unit density less than what would be allowed for a district permitting a greater density. A conditional use authorization for a PUD is required for the dwelling unit density proposed for the site, which would exceed the conditionally permitted density of 1 unit per 3,000 square feet of lot area under planning code section 209.1. Additional dwelling unit density may be permitted by the planning commission as a PUD if the proposed dwelling unit density would be less than the density allowed in the next higher residential district. For the proposed project, the next higher level residential district would be RH-2. In the RH-2 zoning district, 1 dwelling unit per 1,500 square feet of lot area is principally permitted under planning code section 209.1. Accordingly, up to 63 dwelling units may be allowed on the site under a PUD based on a lot area of 95,997 square feet, which is 1 unit fewer than the RH-2 zoning district. The project proposes 62 dwelling units on the site and is, therefore, within the allowable density of the PUD. The project would require a conditional use authorization to exceed the residential density requirements.

The proposed project would require a subdivision approval to create 31 residential lots, one lot for the publicly accessible open space, and one lot for the common open space known as the "spine", all in accordance with the San Francisco Subdivision Code.

The project site is not located in any special use districts, a community plan area, or in a former redevelopment plan area.

AFFORDABLE HOUSING

The proposed project would comply with the city's Residential Inclusionary Affordable Housing Program requirements (planning code sections 415, et seq.) for new residential development with 25 or more units. The project sponsor has elected to provide on-site affordable units pursuant to planning code section 415.5(g). Since the proposed project consists of 25 or more owned units, the number of affordable units constructed on-site is required to be generally 20 percent of all units constructed on the project site. A minimum of 10 percent of the units are required to be affordable to low-income households, 5 percent of the units are required to be affordable to moderate-income households, and 5 percent of the units are required to be affordable to middle-income households. The proposed project would provide 12 on-site affordable units, which is 20 percent of the total number of units, in compliance with planning code requirements.

HEIGHT AND BULK DISTRICTS

The project site is located in a 40-X height and bulk district, which permits a maximum building height of 40 feet. Pursuant to planning code section 270(a), there are no bulk controls in an "X" district. The proposed dwelling units would be 35 feet in height. Thus, the proposed project would comply with the 40-X height and bulk district limits.

STREET TREES

Planning code section 138.1(c)(1) requires that the project sponsor shall plant and maintain street trees as set forth in article 16, sections 805(a) and (d) and 806(d) of the Public Works Code. Sections 805(a) and (d) and 806(d) require that for every 20 feet of property frontage along each street, one 24-inch box tree be planted, with any remaining fraction of 10 feet or more of frontage requiring an additional tree. The proposed project would comply with section 138.1(c)(1) by planting 33 new street trees along the perimeter of the block on Woolsey, Bowdoin, Wyland, and Hamilton streets.

OPEN SPACE REQUIREMENTS

Planning code section 135 requires either 300 square feet of private open space for each dwelling unit, or shared, common open space in the amount of 400 square feet per dwelling unit. The proposed project would be required to provide 18,600 square feet of private open space, or 24,800 square feet of common open space, or a combination thereof. The proposed project would exceed the open space requirements by providing a combination of approximately 14,890 square feet of private open spaces (e.g., courtyards and rear yards) for 34 dwelling units and, for the remaining 28 dwelling units, private shared open space totaling approximately 11,210 square feet (the "spine" and "mews"), where 11,200 square feet would be required. Although not required by the planning code, the proposed project would also provide an approximately 0.39-acre (17,170-square-foot) publicly accessible open space at the corner of Woolsey and Hamilton streets.

PARKING, LOADING, AND STREET FRONTAGE

The proposed project would include a total of 62 parking spaces at a parking ratio of one space per unit, which is less than the 1.5 spaces per dwelling unit permitted under planning code section 151. Each duplex residential unit would include one vehicle parking space in a shared two-car garage accessed through new curb cuts on the project site. The proposed 16-foot-wide garage entrances would allow two vehicles to park side-by-side within the garage, allowing both vehicles to back out independently. Planning code section 144 stipulates that no more than one-third of the width of the ground story along the front lot line, or along a street side lot line, or along a building wall that is set back from any such lot line, shall be devoted to entrances to off-street parking. With regard to street frontages in RH districts, section 144 stipulates that no less than one-third of the width of the ground story along the front lot line, and along a building wall that is set back from any such lot line, shall be devoted to windows, entrances for dwelling units, landscaping, and other architectural features The proposed project's garage entrances facing its respective front lot lines would be more than one-third of its width devoted to an off-street parking entrance and the ground story of the dwelling unit fronting the front lot line would have less than one-third of its width devoted to windows, entrances for dwelling units, landscaping or other features. Therefore, the proposed project would require a conditional use authorization for a PUD to allow for exceptions from the garage entrance and street frontage controls included in planning code section 144.

Planning code section 155.2 requires one secure (class 1) bicycle parking space for each unit, along with one class 2 space for each 20 units.[1] Therefore, the proposed project, with 62 residential units, would require at least 62 class 1 spaces and four class 2 spaces. The proposed project would comply with planning code requirements and provide 93 class 1 and 12 class 2 bicycle parking spaces (the additional amount of bicycle parking is proposed as part of the proposed project's TDM program). Class 1 bicycle parking would be

[1] Planning code section 155.1(a) defines *class 1 spaces* as "spaces in secure, weather-protected facilities intended for use as long-term, overnight, and work-day bicycle storage by dwelling unit residents, nonresidential occupants, and employees." *Class 2 spaces* are "spaces located in a publicly accessible, highly visible location intended for transient or short-term use by visitors, guests, and patrons to the building or use."

provided within the residential unit garages, while class 2 bicycle parking spaces would be provided on Hamilton, Woolsey and Bowdoin streets (four spaces on each street). The project sponsor would be required to work with the San Francisco Municipal Transportation Authority (SFMTA) Bike Parking Program to coordinate the installation of on-street bicycle racks and ensure that the proposed bicycle racks meet the SFMTA's bicycle parking guidelines.

THE ACCOUNTABLE PLANNING INITIATIVE (PROPOSITION M)

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added section 101.1 to the planning code and established eight priority policies. These policies, and the corresponding sections of the initial study or EIR that address the environmental issues associated with the policies, are:

1. Preservation and enhancement of existing neighborhood-serving retail uses and enhancement of future opportunities for resident employment in and ownership of such businesses (Section E.1(b), Land Use and Planning);
2. Conservation and protection of existing housing and neighborhood character to preserve the cultural and economic diversity of neighborhoods (Section E.1(b), Land Use and Planning);
3. Preservation and enhancement of affordable housing (Section E.2(b), Population and Housing, regarding housing supply and displacement);
4. Discouragement of commuter automobiles from impeding Muni service or overburden streets or neighborhood parking (Section E.5(a), Transportation and Circulation, regarding public transit);
5. Protection of industrial and service land uses from commercial office development and enhancement of opportunities for resident employment and business ownership (Section E.1(b), Land Use and Planning);
6. Maximization of preparedness from injury or loss of life in an earthquake (Sections E.15(a) through E.15(d), Geology and Soils);
7. Preservation of landmarks and historic buildings; (EIR Section 3.A, Historic Architectural Resources); and
8. Protection of parks and open space and their access to sunlight and vistas (Section E.10, Shadow, and Section E.11(a), Recreation).

Demolition of the project site could conflict with policy 7, which calls for the preservation of historic buildings. The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR, Section 3.A, Historic Architectural Resources, as noted above.

Prior to issuing a permit for any project that requires an initial study under CEQA; prior to issuing a permit for any demolition, conversion, or change of use; and prior to taking any action that requires a finding of consistency with the general plan, the City is required to find that the proposed project or legislation is consistent with the priority policies. In evaluating general plan consistency of the proposed project, the planning commission and/or planning department would make the necessary findings of consistency with the priority policies.

2. Other Local Plans and Policies

In addition to the general plan, planning code, zoning maps, and the Accountable Planning Initiative, other local plans and policies that are relevant to the proposed project are discussed below.

- **San Francisco Transit First Policy** is a set of principles that emphasize the City's commitment that the use of public rights-of-way by pedestrians, bicyclists, and public transit be given priority over the private automobile. These principles are embodied in the policies and objectives of the transportation element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the City's Transit First Policy principles in conducting the City's affairs.
- **San Francisco Bicycle Plan** is a citywide bicycle transportation plan that identifies short-term, long-term, and other minor improvements to San Francisco's bicycle route network. The overall goal of the San Francisco Bicycle Plan is to make bicycling an integral part of daily life in San Francisco.
- **San Francisco Better Streets Plan** was adopted in 2010 to support the City's efforts to enhance the streetscape and the pedestrian environment. It classifies the city's public streets and rights-of-way and creates a unified set of standards, guidelines, and implementation strategies that govern how the City designs, builds, and maintains its public streets and rights-of-way.
- **San Francisco Climate Action Strategy** is a local action plan that examines the causes of global climate change and the human activities that contribute to global warming. It provides projections regarding climate change impacts on California and San Francisco, based on recent scientific reports; presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets; and describes recommended actions for reducing the city's greenhouse gas emissions.

The proposed project has been reviewed against these local plans and policies and would not obviously or substantially conflict with any of them.

3. Regional Plans and Policies

In addition to local plans and policies, several regional planning agencies have environmental, land use, and transportation plans and policies that consider growth and development in the nine-county San Francisco Bay Area. Some of these plans and policies are advisory; some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project are discussed below.

- The Plan Bay Area and Regional Housing Needs Plan, prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), is a long-range land use and transportation plan for the nine-county Bay Area that covers the period from 2010 to 2040. Plan Bay Area calls for concentrating housing and job growth around transit corridors, particularly in areas identified by local jurisdictions as priority development areas. In addition, Plan Bay Area specifies strategies and investments for maintaining, managing, and improving the region's multimodal transportation network and proposes transportation projects and programs to be implemented from reasonably anticipated revenue. Plan Bay Area was adopted in July 2017.[2]

[2] Metropolitan Transit Commission and Association of Bay Area Governments, Plan Bay Area 2040: Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017–2040, Final, July 26, 2017, *http://files.mtc.ca.gov/library/pub/30060.pdf*, accessed December 4, 2020.

- The Bay Area Air Quality Management District's (air district's) Bay Area 2017 Clean Air Plan requires implementation of "all feasible measures" to reduce ozone and provide a control strategy for reducing ozone, particulate matter, toxic air contaminants, and greenhouse gases. The 2017 Clean Air Plan describes the status of local air quality and identifies the emission control measures that are to be implemented.[3]
- The Regional Water Quality Control Board's Water Quality Control Plan for the San Francisco Bay Basin is a master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.[4]

D. Summary of Environmental Effects

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ Land Use/Planning	☐ Wind	☐ Hydrology/Water Quality
☐ Population and Housing	☐ Shadow	☐ Hazards & Hazardous Materials
☒ Cultural Resources	☐ Recreation	☐ Mineral Resources
☒ Tribal Cultural Resources	☐ Utilities/Service Systems	☐ Energy
☐ Transportation and Circulation	☐ Public Services	☐ Agriculture and Forestry Resources
☒ Noise	☒ Biological Resources	☐ Wildfire
☒ Air Quality	☒ Geology/Soils	☒ Mandatory Findings of Significance
☐ Greenhouse Gas Emissions		

1. Approach to Environmental Review

This initial study examines the proposed project to identify potential effects on the environment. For each item on the initial study checklist, the evaluation considered the impacts of the proposed project both individually and cumulatively, with the exception of greenhouse gas emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked "Less than Significant Impact with Mitigation Incorporated," "Less than Significant Impact," "No Impact," or "Not Applicable," indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that issue. A discussion is included for those issues checked "less than significant impact with mitigation incorporated" and "less than significant impact" and for most items checked "no impact" or "not applicable." For all of the items checked "no impact" or "not applicable"

[3] Bay Area Air Quality Management District, 2017 Clean Air Plan: Spare the Air, Cool the Climate, April 19, 2017, *http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en*, accessed December 4, 2020.

[4] San Francisco Regional Water Quality Control Board, Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, December 16, 2015, *https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/docs/ADA_compliant/BP_all_chapters.pdf*, accessed December 4, 2020.

without discussion, the conclusions regarding potential significant adverse environmental effects are based upon field observation, staff experience, and expertise on similar projects, and/or standard reference material available within the planning department, such as the department's Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database and maps, published by the California Department of Fish and Wildlife.

CEQA Guidelines section 15125 states that the environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The environmental setting typically includes the existing physical conditions on the project site and vicinity, including projects that are under construction. The environmental analysis then presents existing and existing-plus-project scenarios to identify environmental impacts that would occur from implementation of a proposed project. However, where it is certain that near-term improvements would be implemented prior to a project's construction or operation, such analysis could be misleading or confusing to decision-makers and the public. No near-term improvements are identified that would make this analysis misleading or confusing to decision-makers and the public. This analysis uses the existing environmental setting as the baseline physical conditions to determine whether an impact is significant.

For the analysis of potential cumulative effects, each environmental topic herein briefly identifies the cumulative context relevant to that topic. For example, for shadow impacts, the cumulative context would be nearby projects that could contribute to cumulative shadow effects on the same open space affected by the proposed project. In other cases, such as air quality, the context would be the San Francisco Bay Basin.

2. Aesthetics and Parking

In accordance with CEQA section 21099, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, aesthetics and parking shall not be considered in determining if a project has the potential to result in significant environmental effects, provided that the project meets all of the following three criteria:

- The project is in a transit priority area;[5]
- The project is on an infill site;[6] and
- The project is a residential, mixed-use residential, or an employment-center.[7]

The proposed project meets each of the three criteria above because it would be (1) located on infill sites that are already developed and/or are surrounded by other urban development, (2) located within 0.5 mile of several bus transit routes, and (3) a residential use. Therefore, this initial study does not consider aesthetics or parking in determining the significance of project impacts under CEQA.[8] However, the department recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and desire that such information be provided as part of the

[5] CEQA section 21099(a)(7) defines a "transit priority area" as an area within 0.5 mile of an existing or planned major transit stop. A "major transit stop" is defined in CEQA section 21064.3 as a 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.
[6] CEQA section 21099(a)(4) defines an "infill site" as a lot located within an urban area that has been previously developed or a vacant site where at least 75 percent of the perimeter adjoins, or is separated by only an improved public right-of-way from, parcels that are developed with qualified urban uses.
[7] CEQA section 21099(a)(1) defines an "employment center" as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 within a transit priority area.
[8] San Francisco Planning Department, Eligibility Checklist: CEQA Section 21099 – Modernization of Transportation Analysis for 770 Woolsey Street, April 21, 2021.

environmental review process. In addition, CEQA section 21099(e) states that a lead agency has the authority to consider aesthetic impacts, pursuant to local design review ordinances or other discretionary powers, and aesthetic impacts do not include impacts on historical or cultural resources. As such, the department does consider aesthetics for design review and for evaluating effects on historic and cultural resources. Renderings of the proposed project are included in EIR Chapter 2, Project Description.

3. Automobile Delay and Vehicle Miles Traveled

In addition, CEQA section 21099(b)(1) requires the Governor's Office of Planning and Research to develop revisions to the CEQA Guidelines to establish criteria for determining the significance of transportation impacts from projects that "promote a reduction in greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA section 21099(b)(2) states that, upon certification of the revised guidelines for determining transportation impacts, pursuant to section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, the Governor's Office of Planning and Research published for public review and comment its Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA,[9] which recommends using a vehicle-miles-traveled (VMT) metric to measure a project's transportation impacts. On March 3, 2016, the San Francisco Planning Commission adopted the Governor's Office of Planning and Research recommendation to use the VMT metric instead of automobile delay in evaluating the transportation impacts of projects (Resolution 19579). (Note: The VMT metric does not apply to the analysis of project impacts on non-automobile modes of travel, such as riding transit, walking, and bicycling.) Accordingly, this initial study does not contain a discussion of impacts regarding automobile delay. Instead, an impact analysis regarding VMT and induced automobile travel is provided in Section E.5, Transportation and Circulation.

4. Effects Found to Be Potentially Significant

The designation of topics as "potentially significant" in the initial study means that the EIR will consider the topic in greater depth and determine whether the impact would be significant. The proposed project could have a significant effect on historic architectural resources because of the potential for such resources to be disturbed by the proposed project. Accordingly, this topic is analyzed further in the EIR.

5. Effects Found Not to Be Significant or Not Significant with Identified Mitigation Measures

The following potential individual and cumulative environmental effects were determined to be either less than significant, or would be reduced to less than significant with mitigation measures identified in this initial study.

- Land Use and Planning
- Population and Housing

[9] State Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, http://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf, accessed November 11, 2020.

- Cultural Resources (archeological resources)
- Tribal Cultural Resources
- Transportation and Circulation
- Noise
- Air Quality
- Greenhouse Gas Emissions
- Wind
- Shadow
- Recreation
- Utilities and Service Systems
- Public Services
- Biological Resources
- Geology and Soils
- Hydrology and Water Quality
- Hazards and Hazardous Materials
- Mineral Resources
- Energy Resources
- Agricultural and Forest Resources
- Wildfire

These items are discussed and mitigation measures are included, where appropriate, in Section E of this initial study. They require no further environmental analysis in an EIR. All mitigation measures identified in this initial study are listed in Section F, Mitigation Measures. These measures have been agreed to by the project sponsor and will be implemented.

CUMULATIVE IMPACTS

The cumulative impact analyses for topics addressed in Section E, Evaluation of Environmental Effects, uses a combination of list-based and citywide-projections-based approaches. Reasonably foreseeable development and infrastructure projects that could potentially contribute to cumulative impacts on various resource topics are listed in EIR Table 3-1, Cumulative Projects within a 0.25-Mile Radius of the Proposed Project, p. 3-7, and mapped on EIR Figure 3-1, Cumulative Projects within a 0.25-Mile Radius of the Project Site, p. 3-8.

E. Evaluation of Environmental Effects

1. Land Use and Planning

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
1. LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
b) Cause a significant physical environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	☐

Impact LU-1: The proposed project would not physically divide an established community. ***(No Impact)***

The division of an established community typically involves the construction of a physical barrier to neighborhood access, such as a new freeway, or the removal of a means of access, such as a bridge or a roadway. The proposed project would not result in the construction of a physical barrier to neighborhood access or the removal of an existing means of access. It would result in the demolition of the existing structures related to the site's previous agricultural use and construction of 62 dwelling units and publicly accessible open space entirely within the boundaries of the project site. The proposed project would not alter the established street grid, permanently close any streets or sidewalks, or impede the passage of persons or vehicles. Although portions of the sidewalks and streets adjacent to the project site could be closed for periods of time during project construction, these closures would be temporary and only occur during construction. For these reasons, the proposed project would not physically divide an established community. Accordingly, the proposed project would have ***no impact*** with respect to physically dividing an established community, and no mitigation measures are required.

Impact LU-2: The proposed project would not cause a significant physical environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. ***(Less than Significant)***

Land use impacts could be considered significant if the proposed project would conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Environmental plans and policies are those that directly address environmental issues and/or contain targets or standards that must be met in order to preserve or improve characteristics of the city's physical environment.

As described in Section C, Compatibility with Existing Zoning and Plans, the proposed project would not obviously or substantially conflict with any adopted environmental plan or policy, with the exception of the historic preservation policies contained in the urban design element of the general plan and the Accountable Planning Initiative. Physical environmental impacts resulting from these conflicts with historic preservation policies are discussed in topic E.4, Historic Architectural Resources, below, and evaluated in Section 3.A, Historic Architectural Resources, of the EIR.

To the extent that the proposed project would conflict with general plan objectives and policies that are unrelated to physical environmental issues, those conflicts would be considered by decision makers as part of their decision to approve or disapprove the proposed project independent of the environmental clearance process. Potential conflicts with applicable general plan objectives and policies would continue to be analyzed and considered as part of the review of the entitlement applications required for the proposed project independent of environmental review under CEQA. In addition, the proposed project would not obviously or substantially conflict with any adopted environmental plan or policy, including the 2017 Clean Air Plan, San Francisco's Strategies to Address Greenhouse Gas Emissions (GHG Reduction Strategy), and the San Francisco Urban Forestry Ordinance, as discussed in Section E.7, Air Quality, Section E.8, Greenhouse Gas Emissions, and Section E.14, Biological Resources, nor any of the local plans and policies identified in Section C.2, Other Local Plans and Policies. Therefore, the proposed project would have a ***less-than-significant*** impact with regard to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Impact C-LU-1: The proposed project, in combination with cumulative projects, would not result in a significant cumulative impact related to land use and planning. ***(Less than Significant)***

The context for the cumulative analysis is the cumulative development in the vicinity of the project site. Table 3-1, p. 3-7, and Figure 3-1, p. 3-8, in Chapter 3 of the EIR identifies cumulative development projects. The cumulative projects include development of three net new residential units. Similar to the proposed project, the cumulative projects would increase the number of residential units within an existing residential area and would not combine with the proposed project to alter the land use pattern of the immediate area or physically divide an established community. The cumulative projects would not result in conflicts with land use plans or policies adopted for the purpose of avoiding or mitigating environmental impacts, because they would be consistent with the city's objectives for increasing the supply of housing. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less-than-significant*** cumulative impact related to land use and planning.

2. Population and Housing

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
2. POPULATION AND HOUSING. Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	☐
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?	☐	☐	☐	☒	☐

Impact PH-1: The proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly. ***(Less than Significant)***

Plan Bay Area 2040, which is the current regional transportation plan and sustainable communities strategy, adopted by MTC and ABAG in July 2013, contains housing and employment projections for San Francisco through 2040. Plan Bay Area calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and the services necessary for daily living in proximity to housing and jobs. With its abundant transit services and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth.

According to the U.S. Census Bureau's most recent American Community Survey, the City and County of San Francisco had an estimated population of about 881,549 residents, and 401,452 housing units in 2019.[10] Census tract 259, which includes the project site and immediate vicinity, has a population of 4,809 and a total of 1,475 housing units.[11] The proposed project would construct 62 dwelling units within Census Tract 259 in the Portola neighborhood of San Francisco. Based on the average household size in the City and County of San Francisco of 2.36 people per household,[12] the addition of 62 new residential units would increase the citywide population by approximately 146 residents.[13] This would represent a residential population increase of approximately 3.0 percent over the existing census tract population, and approximately 0.02 percent citywide.

In general, a project would be considered growth-inducing if its implementation would result in a substantial unplanned population growth in an area, either directly or indirectly. While the addition of 146 people on the project site would be noticeable to residents of immediately adjacent properties, this would not constitute a substantial increase in the population of the neighborhood or the city. Therefore, the population introduced on the project site as a result of the proposed project would be accommodated within the planned growth

[10] U.S. Census Bureau, *San Francisco County, California*, 2019, https://www.census.gov/quickfacts/sanfranciscocountycalifornia, accessed May 5, 2020.
[11] U.S. Census Bureau, *2018: ACS 5-Year Estimates Data Profiles, Census Tract 259, San Francisco County, California*, accessed May 12, 2020.
[12] U.S. Census Bureau, *San Francisco County, California*, 2019, https://www.census.gov/quickfacts/sanfranciscocountycalifornia, accessed May 5, 2020.
[13] 62 residential units x 2.36 people per household = 146 new residents.

for the neighborhood and the city, as a whole, and would not directly induce substantial population growth. The proposed project also would not extend any roads or other infrastructure into areas where roads or other infrastructure currently do not exist, which could indirectly induce population growth. Moreover, the proposed project would be consistent with general plan objectives and policies and Plan Bay Area goals and criteria, as it is located on an infill site, is served by existing transit, and is in an established residential neighborhood. Furthermore, as discussed in Section E.12, Utilities and Service Systems, and Section E.13, Public Services, the population growth generated under the proposed project would not require the expansion of infrastructure or services that could cause adverse physical environmental impacts.

For these reasons, the proposed project would not induce substantial direct or indirect unplanned growth in the Portola neighborhood, or in San Francisco as a whole, and impacts would be ***less than significant***.

Impact PH-2: The proposed project would not displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing. ***(No Impact)***

The proposed project would not displace any residents or housing units, since no housing units currently exist on the project site. Therefore, the proposed project would have ***no impact*** related to the displacement of housing units or people and would not necessitate the construction of replacement housing, and no mitigation measures are required.

Impact C-PH-1: The proposed project, in combination with cumulative projects in the vicinity, would not result in a significant cumulative impact related to population and housing. ***(Less than Significant)***

The cumulative context for population and housing effects are typically citywide. San Francisco's population is expected to increase by 280,490 persons for a total of 1,085,730 persons by 2040.[14] This would represent a residential population increase of approximately 3.0 percent over the existing census tract population, and approximately 0.02 percent citywide. The proposed project in combination with the cumulative projects would result in a population increase of 153 residents and an increase of 65 residential units. This population growth would constitute only a minor fraction of projected citywide growth, and has been anticipated and accounted for in ABAG's and the city's projections

Over the last several years, the supply of housing has not met the demand for housing in San Francisco. In December 2013, the ABAG projected regional housing needs in the *Regional Housing Need Plan for the San Francisco Bay Area: 2015–2023*. According to this report, the housing growth need of San Francisco for 2015 through 2023 is 28,869 dwelling units: 6,234 units in the very low income level (0 to 50 percent of the area median income); 4,639 units in the low income level (51 to 80 percent); 5,460 units in the moderate income level (81 to 120 percent); and 12,536 units in the above moderate income level (120 percent and higher).[15] The proposed project, in combination with cumulative projects, would introduce 65 housing units (12 of which would be affordable housing units), which is consistent with the development needs identified in Plan Bay Area 2040, a state-mandated, integrated long-range transportation, land use, and housing plan.[16] Therefore, while the proposed project, in combination with other cumulative development, would increase the population in the area, it would not induce substantial population growth beyond that already

[14] Association of Bay Area Governments, *Plan Bay Area*, p. 40, *Plan Bay Area (2013) | Plan Bay Area*, accessed May 5, 2020.
[15] ABAG, *Regional Housing Need Plan, San Francisco Bay Area, 2015–2023*, July 2013.
[16] Metropolitan Transportation Commission and ABAG, *Plan Bay Area: 2040*, July 26, 2017, https://www.planbayarea.org/plan-bay-area-2040, accessed October 5, 2020.

anticipated to occur. As such, the proposed project, in combination with cumulative projects would result in a ***less-than-significant*** cumulative impact related to population and housing.

3. Cultural Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
3. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?	☒	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	☐

Impact CR-1: The proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5. ***(Potentially Significant)***

The proposed project would demolish the structures on the project site and has the potential to result in a significant impact related to historic architectural resources. Therefore, this topic is addressed in Section 3.A, Historic Architectural Resources of the EIR.

Impact CR-3: The proposed project could cause a substantial adverse change in the significance of an archeological resource. ***(Less than Significant with Mitigation)***

The proposed project would require excavation of approximately 10,800 cubic yards of soil to a depth of 5 feet below ground surface (bgs), and removal of approximately 6,000 cubic yards of soil from the project site. The planning department conducted a preliminary archeological review of the project site to determine the potential for the proposed project to impact archeological resources.[17]

The preliminary archeological review determined that there are no known or suspected historic-period resources on or near the project site. A fenced parcel about a block in size with three structures, was present immediately east of the project site in 1869, with similar scattered rural development in the vicinity. By 1905, much of the street grid north of the project site had been developed, but the streets immediately surrounding the project site do not appear to have been completed. A branch of Yosemite Creek ran along

[17] San Francisco Planning Department, *Preliminary Archeological Review: 770 Woolsey Street*, January 2021. Unless otherwise noted, the site description is based on this preliminary review.

the southern boundary of the project site until 1911. The project site remained vacant in 1914, and was at the edge of suburban/rural development, although the adjacent streets had been established by that time. The existing structures at the site were constructed beginning in 1922.

The preliminary archeological review notes that there were exposed soils around the margins of the site, but no evidence of archeological deposits was identified in these locations. Based on the history of development, the potential for historic-period resources appears to be low, with the possible exception of historic-period materials incidentally deposited, associated with greenhouse workers after the 1920s and the historically significant nursery. Soils under the fill and above bedrock are shallow in the western (upslope) part of the site. The relative elevations of the adjacent blocks indicate that substantial cut and fill has occurred on portions of the project site. However, the preliminary archeological review also determined that a branch of Yosemite Creek ran along the southern boundary of the project site, which suggests the potential for prehistoric occupation. Based on the potential for prehistoric sites to be located along Yosemite Creek that were later buried by flooding, the relatively gentle slope, the proximity to a creek, and late and light development history of the project site, the preliminary archeological review determined that the project site has a high to very high potential for near surface and buried prehistoric resources to be present. Construction activity and excavation could result in significant impacts to these potential archeological resources. To reduce potential impacts on archeological resources to a less-than-significant level, the project sponsor would be required to implement **Mitigation Measure M-CR-2, Archeological Testing**.

> **Mitigation Measure M-CR-2: Archeological Testing.** Based on a reasonable presumption that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant having expertise in California prehistoric and urban historical archeology. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines section 15064.5(a)(c).
>
> *Archeological Testing Program.* The archeological testing program shall be conducted in accordance with the approved Archeological Testing Plan (ATP). The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.
>
> The archeological consultant and the ERO shall consult on the scope of the ATP reasonably prior to any project-related soils disturbing activities commencing. The archeological consultant shall prepare and submit to the ERO for review and approval an ATP. The ATP shall identify the property

types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, lay out what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ATP shall also identify the testing method to be used, and the locations recommended for testing and shall identify archeological monitoring requirements for construction soil disturbance as warranted. The archeologist shall implement the approved testing as specified in the approved ATP prior to and/or during construction. The archeologist shall consult with the ERO at the conclusion of testing to report testing results, determine whether data recovery is needed, and provide construction monitoring recommendations and shall implement monitoring as determined in consultation with the ERO.

Archeological Data Recovery Plan. If testing results are positive and the ERO determines that an archeological data recovery program is warranted, the archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Consultation with Descendant Communities. On discovery of an archeological site associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group an appropriate representative of the descendant group and the ERO shall be contacted. The

representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archeological Resources Report (FARR) shall be provided to the representative of the descendant group.

Human Remains and Funerary Objects. The treatment of human remains and funerary objects discovered during any soils disturbing activity shall comply with applicable State and federal laws. This shall include immediate notification of the Medical Examiner of the City and County of San Francisco and, in the event of the Medical Examiner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission, which will appoint a Most Likely Descendant (MLD). The MLD will complete his or her inspection of the remains and make recommendations or preferences for treatment within 48 hours of being granted access to the site (Public Resources Code section 5097.98). The ERO also shall be notified immediately upon the discovery of human remains.

The project sponsor and ERO shall make all reasonable efforts to develop a Burial Agreement ("Agreement") with the MLD, as expeditiously as possible, for the treatment and disposition, with appropriate dignity, of human remains and associated or unassociated funerary objects (as detailed in CEQA Guidelines section 15064.5(d)). The Agreement shall take into consideration the appropriate excavation, removal, recordation, scientific analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If the MLD agrees to scientific analyses of the remains and/or associated or unassociated funerary objects, the archeological consultant shall retain possession of the remains and associated or unassociated funerary objects until completion of any such analyses, after which the remains and associated or unassociated funerary objects shall be reinterred or curated as specified in the Agreement.

Nothing in existing State regulations or in this mitigation measure compels the project sponsor and the ERO to accept treatment recommendations of the MLD. However, if the ERO, project sponsor, and MLD are unable to reach an Agreement on scientific treatment of the remains and associated or unassociated funerary objects, the ERO, with cooperation of the project sponsor, shall ensure that the remains and associated or unassociated funerary objects are stored securely and respectfully until they can be reinterred on the property, with appropriate dignity, in a location not subject to further or future subsurface disturbance.

Treatment of historic-period human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity, additionally, shall follow protocols laid out in the project's archeological treatment documents, and in any related agreement established between the project sponsor, Medical Examiner, and the ERO.

Archeological Public Interpretation Plan. The project archeological consultant shall submit an Archeological Public Interpretation Plan (APIP) if a significant archeological resource is discovered during a project. If the resource to be interpreted is a tribal cultural resource, the APIP shall be prepared in consultation with and developed with the participation of Ohlone tribal representatives. The APIP shall describe the interpretive product(s), locations or distribution of interpretive materials or displays, the proposed content and materials, the producers or artists of the displays or

installation, and a long-term maintenance program. The APIP shall be sent to the ERO for review and approval. The APIP shall be implemented prior to occupancy of the project.

Final Archeological Resources Report. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO. The archeological consultant shall submit a draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological, historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken, and if applicable, discusses curation arrangements. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound and one unlocked, searchable PDF copy on digital medium of the approved FARR along with GIS shapefiles of the site and feature locations and copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Curation. Significant archeological collections shall be permanently curated at an established curatorial facility selected in consultation with the ERO.

Implementation of Mitigation Measure M-CR-2 would ensure that potential impacts on archeological resources as a result of construction-related activities on the project site would be ***less than significant with mitigation***.

Impact CR-4: The project could disturb human remains, including those interred outside of formal cemeteries. ***(Less than Significant with Mitigation)***

There are no known or suspected human remains, including those interred outside of formal cemeteries, located in the immediate vicinity of the project site. In the unlikely event that human remains are encountered during construction, any inadvertent damage to human remains would be considered a significant impact. **Mitigation Measure M-CR-2, Archeological Testing**, includes the required procedures to address, protect, and treat human remains should any be discovered during construction. With implementation of Mitigation Measure M-CR-2, as described above, the proposed project's impacts on human remains would be ***less than significant with mitigation***.

Impact C-CR-1: The proposed project, in combination with cumulative projects, could result in demolition and/or alteration of historical resources, as defined in CEQA Guidelines section 15064.5. ***(Potentially Significant)***

This topic is analyzed in Section 3.A, Historic Architectural Resources of the EIR.

Impact C-CR-2: The proposed project, in combination with cumulative projects, would not result in significant cumulative impacts on archeological resources and human remains. ***(Less than Significant)***

Although archeological resources may be present on the project site, and could be affected by site development, project-related impacts on archeological resources and human remains are site-specific and generally limited to a project's construction area and would be mitigated to a less-than-significant level with implementation of Mitigation Measure M-CR-2. Impacts on resources on the project site would be mitigated to less than significant levels. There are no anticipated projects on adjacent parcels that would have the potential to affect the same resources. For these reasons, the proposed project, in combination with cumulative projects, would not have a significant cumulative impact on archeological resources or human remains; therefore, this impact would be ***less than significant***.

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4. Tribal Cultural Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
4. TRIBAL CULTURAL RESOURCES. Would the project:					
a) 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, or 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:					
i) 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	☐	☒	☐	☐	☐
ii) 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 the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐	☐

Impact TCR-1: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. ***(Less than Significant with Mitigation)***

Pursuant to CEQA section 21074, tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either (a) included or determined to be eligible for inclusion in the California register or (b) included in a local register of historical resources as defined in CEQA section 5020.1(k). Pursuant to CEQA section 21080.3.1(d), on November 9, 2020, the planning department contacted Native American individuals and organizations for the San Francisco area, providing a description of the project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project vicinity.[18] During the 30-day comment period, no Native American tribal representatives contacted the planning department to request consultation. Based on prior Native American consultation, in San Francisco, prehistoric archeological resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project impacts its significance, which would occur if such a resource were disturbed or destroyed. Based on prior Native American consultation, the preferred treatment for identified tribal cultural resources is preservation in place. If preservation is not feasible, then archeological data recovery is the preferred treatment in consultation with local Native American representatives, in conjunction with public interpretation, as detailed under TCR-1, below. To reduce the potential for impacts to tribal cultural resources to less-than-significant levels, the project sponsor would be required to incorporate **Mitigation Measure M-TCR-1, Tribal Cultural Resources Archeological Resource Preservation Plan and/or Interpretive Program**.

> **Mitigation Measure M-TCR-1: Tribal Cultural Resources Archeological Resource Preservation Plan and/or Interpretive Program.**
>
> *Preservation in Place.* In the event of the discovery of an archeological resource of Native American origin, the Environmental Review Officer (ERO), the project sponsor, and the tribal representative, shall consult to determine whether preservation in place would be feasible and effective. If it is determined that preservation-in-place of the tribal cultural resource (TCR) would be both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP), which shall be implemented by the project sponsor during construction. The consultant shall submit a draft ARPP to Planning for review and approval.
>
> *Interpretive Program.* If the Environmental Review Officer (ERO), in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. A Tribal Cultural Resources Interpretation Plan (TCRIP) produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local

[18] San Francisco Planning Department, *Tribal Notification Regarding Tribal Cultural Resources and CEQA,* November 9, 2020.

Native American artists, oral histories with local Native Americans, artifacts displays and interpretation, and educational panels or other informational displays.

Implementation of **Mitigation Measure M-TCR-1** would require the appropriate involvement of concerned Native Americans in the treatment of tribal cultural resources discovered during construction and ensure that any such resource would be preserved, or that the information it represents would be preserved and interpreted to the public. These steps would ensure that project excavation would not cause a substantial adverse change in the significance of tribal cultural resources that could be encountered during construction, and that the project's potential impact would be ***less than significant with mitigation***.

Impact C-TCR-1: The proposed project, in combination with cumulative projects, would not result in significant cumulative impacts to tribal cultural resources. ***(Less than Significant)***

Project-related impacts on tribal cultural resources are site-specific and generally limited to a project's construction area. In San Francisco, prehistoric archeological resources are considered to be tribal cultural resources. Any project impacts to such a resource would be mitigated to less than significant levels through implementation of M-TCR-1 and, if the resource cannot be avoided, archeological data recovery in consultation with local Native American representatives (as detailed in M-CR-2, above) and public interpretation. There are no anticipated projects on adjacent parcels that would have the potential to affect the same resources. For these reasons, the proposed project, in combination reasonably foreseeable future projects, would have a ***less-than-significant*** cumulative impact on tribal cultural resources.

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5. Transportation and Circulation

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
5. TRANSPORTATION AND CIRCULATION. Would the project:					
a) Involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit?	☐	☐	☒	☐	☐
b) Create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations?	☐	☐	☒	☐	☐
c) Interfere with accessibility of people walking or bicycling to and from the project site, and adjoining areas, or result in inadequate emergency access?	☐	☐	☒	☐	☐

Topics:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
d) Substantially delay public transit?	☐	☐	☒	☐	☐
e) Cause substantial additional vehicle miles travelled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network?	☐	☐	☒	☐	☐
f) Result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving; or substantially delay public transit?	☐	☐	☒	☐	☐
g) Result in a substantial vehicular parking deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving; or interfere with accessibility for people walking or bicycling or inadequate access for emergency vehicles; or substantially delay public transit?	☐	☐	☒	☐	☐

This section presents the existing transportation and circulation conditions and analyzes the potential project-level and cumulative impacts on transportation and circulation during construction and operation of the proposed project. Transportation and circulation topics include walking, bicycling, driving hazards, transit, emergency access, vehicle miles traveled, and loading.

ENVIRONMENTAL SETTING

The 2.2-acre project site is bounded by Wayland Street to the north, Hamilton Street to the east, Woolsey Street to the south, and Bowdoin Street and the University Mound Reservoir to the west (see EIR Figure 2-1, Project Location Map, p. 2-3).

Roadways. Wayland Street, Hamilton Street, Woolsey Street, and Bowdoin Street are all two-way, two-lane (one in each direction) neighborhood residential streets with parallel parking on both sides; the frontages of Woolsey and Bowdoin Streets along the University Mound Reservoir (west of the project site) are designated as park edge streets.[19] Wayland and Woolsey Streets run in the east-west direction; Hamilton and Bowdoin Streets run in the north-south direction. None of the four local roadways used to access the project site have been identified as high injury corridors on the Vision Zero High Injury Network.[20]

[19] San Francisco Planning Department, San Francisco Better Streets Plan: Street Types, https://www.sfbetterstreets.org/designguidelines/street-types/, accessed September 28, 2020. Neighborhood Residential streets are characterized by relatively low traffic volumes and speeds and Park Edge streets are characterized by higher-than-normal pedestrian activity.

[20] San Francisco Department of Public Health, Vision Zero High Injury Network: 2017, http://sfgov.maps.arcgis.com/apps/webappviewer/index.html?id=fa37f1274b4446f1bdddd7bdf9e708ff, accessed September 28, 2020.

Bicycle Facilities. There are no designated bicycle facilities located adjacent to the project site.

Pedestrian Facilities. There are sidewalks along both sides of the street on Woolsey and Hamilton streets. There is no sidewalk on the east side of Bowdoin Street (project frontage), and only a partial sidewalk on the west side of the street (University Mount Reservoir frontage). There is a sidewalk on the north side of Wayland Street, but no sidewalk on the south side of the street (project frontage). Sidewalks are approximately 10 feet wide and are in fair condition and absent of hazards. The four intersections at the four corners of the project site are stop-controlled; ADA-compliant, striped pedestrian crosswalks and curb ramps are only provided at the Woolsey and Hamilton street intersection at the southeast corner of the project site.

Transit. The project site is served by the San Francisco Municipal Transportation Agency (Muni) transit network and is located adjacent to the 54-Felton line. Other Muni bus lines that operate within 0.5 mile of the project include the 8-Bayshore, 9-San Bruno, 9R-San Bruno Rapid, 29-Sunset, and 44-O'Shaughnessy.

Emergency Access. The project site receives fire protection and emergency medical services from the San Francisco Fire Department's Fire Station No. 42 at 2430 San Bruno Avenue, approximately 0.6 mile northeast of the project site.[21] The project site receives police protection services from the San Francisco Police Department's Bayview Station at 201 Williams Avenue, approximately 0.75 mile northeast of the project site.[22] Emergency access to the site is available along all four local roadways providing access to the project site.

Vehicle Miles Traveled. Vehicle miles traveled (VMT) per person (or per capita) is a measurement of the amount and distance that a resident, employee, or visitor drives, accounting for the number of passengers within a vehicle. In general, higher VMT areas are associated with more air pollution, including greenhouse gas emissions, and energy usage than lower VMT areas. Many interdependent factors affect the amount and distance a person might drive. In particular, the built environment affects how many places a person can access within a given distance, time, and cost, using different ways of travels (e.g., private vehicle, public transit, bicycling, walking, etc.). Typically, low-density development located at great distances from other land uses and in areas with few options for ways of travel provides less access than a location with high density, a mix of land uses, and numerous ways of travel. Therefore, low-density development typically generates more VMT compared to a similarly sized development located in urban areas.

Given these travel behavior factors, on average, persons living or working in San Francisco result in lower amounts of VMT per person than persons living or working elsewhere in the nine-county San Francisco Bay Area region. In addition, on average, persons living or working in some areas of San Francisco result in lower amounts of VMT per person than persons living or working elsewhere in San Francisco. The city displays different amounts of VMT per capita geographically through transportation analysis zones.[23]

The San Francisco County Transportation Authority uses the San Francisco chained activity modeling process to estimate VMT by private automobiles and taxis for different transportation analysis zones. The transportation authority calibrates travel behavior in the model based on observed behavior from the California Household Travel Survey [2010-2012], census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. The model uses a

[21] San Francisco Fire Department, Fire Station Locations, http://sf-fire.org/FIRE-STATION-LOCATIONS#divisions, accessed September 28, 2020.
[22] San Francisco Police Department, Police District Maps, http://sanfranciscopolice.org/police-district-maps?page=796, accessed September 28, 2020.
[23] Planners use these zones as part of transportation planning models for transportation analyses and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas such as the Hunters Point Shipyard area.

synthetic population, which is a set of individual actors that represents the Bay Area's actual population, who make simulated travel decisions for a complete day.

The model estimates daily VMT for residential, office, and retail land use types. For residential and office uses, the transportation authority uses tour-based analysis. A tour-based analysis examines the entire chain of trips over the course of a day, not just trips to and from a site. For retail uses, the transportation authority uses trip-based analysis. A trip-based analysis counts VMT from individual trips to and from a site (as opposed to entire chain of trips). A trip-based approach, as opposed to a tour-based approach, is necessary for retail sites because a tour is likely to consist of trips stopping in multiple locations, and the summarizing of tour VMT to each location would over-estimate VMT.[24,25,26]

The existing average daily VMT per capita for residents for the nine-county San Francisco Bay Area is 17.2 miles. For transportation analysis zone 901, the zone in which the project site is located, the existing average daily VMT per capita for residents is 10.5 miles. The existing average daily VMT per capita for the residential uses at the project site (10.5 miles) is approximately 39 percent lower than the regional Bay Area average (17.2 miles).

Loading. There are no commercial or passenger loading zones within a block of the project site.

APPROACH TO ANALYSIS

The following summarizes the methodology and results for the proposed project's travel demand and describes the quantitative thresholds of significance used for determining transportation impacts under existing plus project conditions. The travel demand and impact analysis methodology use the data and guidance within the planning department's 2019 *Transportation Impact Analysis Guidelines for Environmental Review* (SF Guidelines).

Project Travel Demand. Localized daily and p.m. peak period trip generation for the proposed project was calculated using a trip-based analysis and information included in the SF Guidelines for residential uses developed by the San Francisco Planning Department.[27] These trips are summarized in **Table 1**. Trip generation refers to the number of estimated trips people would take to and from the project (person trips). These trips are broken down by mode, or the estimated way or method people travel (e.g., walking, bicycling, transit, etc.). Auto trips are further broken down into vehicle trips, which account for average vehicle occupancy in the census tract in which the project site resides.

[24] To state another way: a tour-based assessment of VMT at a retail site would consider the VMT for all trips in the tour, for any tour with a stop at the retail site. If a single tour stops at two retail locations, for example, a coffee shop on the way to work and a restaurant on the way back home, then both retail locations would be allotted the total tour VMT. A trip-based approach allows us to apportion all retail-related VMT to retail sites without double-counting.

[25] Retail travel is not explicitly captured in San Francisco chained activity modeling process, rather, there is a generic "Other" purpose which includes retail shopping, medical appointments, visiting friends or family, and all other non-work, non-school tours. The retail efficiency metric captures all of the "Other" purpose travel generated by Bay Area households. The denominator of employment (including retail; cultural, institutional, and educational; and medical employment; school enrollment, and number of households) represents the size, or attraction, of the zone for this type of "Other" purpose travel.

[26] San Francisco Planning Department, Executive Summary: Resolution Modifying Transportation Impact Analysis, Appendix F, Attachment A, March 3, 2016.

[27] San Francisco Planning Department, Travel Demand Tool, https://sftraveldemand.sfcta.org/, accessed September 28, 2020.

Table 1 Proposed Project Travel Demand

Mode	Person Trips		Vehicle Trips	
	Daily	PM Peak Period	Daily	PM Peak Period
Auto	277	25	180	16
TNC/Taxi	25	2	17	2
Transit	135	12		
Private Shuttle	2	1		
Bike	28	3		
Walk	244	22		
Total	***711***	***65***	***197***	***18***

Vehicle Miles Traveled Analysis (Existing). The planning department uses the following quantitative thresholds of significance to determine whether the project would generate substantial additional VMT:

- For residential projects, if it exceeds the regional household VMT per capita minus 15 percent.
- For office projects, if it exceeds the regional VMT per employee minus 15 percent.
- For retail projects, if it exceeds the regional VMT per retail employee minus 15 percent.
- For mixed-use projects, evaluate each land use independently, per the thresholds of significance described above.

The planning department uses VMT efficiency metrics (i.e., per capita) for thresholds of significance. VMT per capita reductions mean that individuals will, on average, travel less by automobile than previously but, because the population will continue to grow, it may not mean an overall reduction in the number of miles driven.

The planning department uses a map-based screening criterion to identify types and locations of land use projects that would not exceed these quantitative thresholds of significance. The San Francisco County Transportation Authority uses a model to present VMT for residential, office, and retail in San Francisco and the region, as described and shown under existing conditions. The department uses that data and associated maps to determine whether a project site's location is below the VMT quantitative threshold of significance.

The planning department also presumes that small projects (projects that would generate fewer than 100 vehicle trips per day) would not exceed these quantitative thresholds of significance. Furthermore, the department presumes residential uses proposed within 0.5 mile of an existing major transit stop (as defined by CEQA section 21064.3) or an existing stop along a high-quality transit corridor (as defined by CEQA section 21155) would not exceed these quantitative thresholds of significance. However, this presumption would not apply if the project would: (1) have a floor area ratio of less than 0.75; (2) include more parking for use by residents, customers, or employees of the project than required or allowed, without a conditional use; or (3) is inconsistent with the applicable Sustainable Communities Strategy.[28]

[28] The department considers a project to be inconsistent with the Sustainable Communities Strategy if the project is located outside of areas contemplated for development in the Sustainable Communities Strategy.

TRANSPORTATION IMPACTS

San Francisco Administrative Code chapter 31 directs the department to identify environmental effects of a project using as its base the environmental checklist form set forth in CEQA Guidelines Appendix G. As it relates to transportation and circulation, Appendix G asks whether the project would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; and
- Result in inadequate emergency access.

The department uses significance criteria to facilitate the transportation analysis and address the Appendix G checklist. The department separates the significance criteria into construction and operation.

CONSTRUCTION

Construction of the proposed project would have a significant effect on the environment if it would require a substantially extended duration or intense activity; and the effects would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; or interfere with accessibility for people walking or bicycling or substantially delay public transit.

OPERATION

The operational impact analysis addresses the following five significance criteria. A project would have a significant effect if it would:

- Create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations;
- Interfere with accessibility of people walking or bicycling to and from the project site, and adjoining areas, or result in inadequate emergency access;
- Substantially delay public transit;
- Cause substantial additional VMT or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network; or
- Result in a loading deficit and the secondary effects would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit.

IMPACT ANALYSIS

Impact TR-1: Construction of the proposed project would not require a substantially extended duration or an intense activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or for public transit operations; would not interfere with emergency access or accessibility for people walking or bicycling; and would not substantially delay public transit. ***(Less than Significant)***

Construction of the proposed project is anticipated to occur over a 24-month period and begin in early 2022. Construction would begin with mobilization and staging, followed by demolition and site preparation, structural and large utility work, and architectural and site work. Construction would occur in a single phase, with no occupancy of the residential units until construction is complete. The site preparation and grading would require approximately 10,800 cubic yards of excavation to a maximum depth of 5 feet bgs. Approximately 6,000 cubic yards of soil would be hauled offsite and 6,000 cubic yards of clean soil would be imported.

Construction would generally occur between the hours of 8 a.m. and 4 p.m., consistent with San Francisco Police Code section 2908. Certain construction activities such as large concrete pours, may require earlier start or later finish times to accommodate such time-specific activities. Construction activities that extend beyond normal hours would be subject to review, permitting, and approval by the San Francisco Department of Building Inspection (building department).

Construction activities would temporarily restrict pedestrian access to the existing sidewalks along Woolsey and Hamilton Streets while streetscape and sidewalk improvements are being constructed. Changes to the transportation network in the project area related to construction activities (e.g., travel lane or sidewalk closures) would be temporary. Construction activities in San Francisco that have the potential to affect the transportation network are subject to the San Francisco Municipal Transportation Agency's San Francisco Regulations for Working in San Francisco Streets ("The Blue Book"), as well as the public works code and public works department orders.[29] The Blue Book establishes rules for working safely and causing the least possible interference with people walking, bicycling, taking transit or driving and/or transit operations.

If project construction activities are not able to comply with The Blue Book, the contractor must apply for a special traffic permit from the SFMTA. Additionally, all traffic control implemented as part of any special traffic permit conditions would be required to conform to the California Manual of Uniform Traffic Control Devices.[30] With respect to public works' policy, a safe and accessible path of travel must be provided for all people walking, including those with disabilities, around construction sites.[31] To that end, the public works code includes requirements related to excavation in the public right-of-way and may require the development and implementation of a contractor parking plan. In addition to these, the contractor would be responsible for complying with all city, state and federal codes, rules and regulations. During the 24-month construction period, vehicle trips associated with construction workers would be generated. However, given the project

[29] San Francisco Municipal Transportation Agency, *City and County of San Francisco Regulations for Working in San Francisco Streets*, January 2012, *https://www.sfmta.com/reports/construction-regulations-blue-book,* accessed November 2020.
[30] California Department of Transportation, *2014 California Manual of Uniform Traffic Control Devices Rev 5*, March 2020, *https://dot.ca.gov/programs/safety-programs/camutcd*, accessed November 2020.
[31] San Francisco Public Works, *Guidelines for the Placement of Barricades at Construction Sites (ORDER NO. 167,840)*, 2008, *http://sfpublicworks.org/sites/default/files/Guidelines_for_Placement_of_Barricades_0.pdf*, accessed November 2020.

site's proximity to high-quality local and regional transit service on nearby San Bruno Avenue, a substantial portion of construction workers would be expected to take public transit to and from the project site.

Construction staging would largely occur on the project site, with transport of materials occurring either via Woolsey or Hamilton streets. The impact of construction traffic would temporarily reduce the capacities of surrounding roadways and truck routes, as well as connecting local streets, due to the slower movement and larger turning radii of trucks. Construction truck and worker vehicle traffic could result in minor congestion and conflicts with vehicles, transit, people walking, and bicyclists. However, construction activities would be temporary and of limited duration, and the majority of construction activity would occur during off-peak hours when traffic volumes are minimal and potential for conflicts is low. No bicycle facilities are adjacent to the project site. Emergency access on all streets adjacent to the site would be maintained throughout construction.

Based on the discussion above, construction of the proposed project would result in a ***less-than-significant*** transportation impact and no mitigation measures are required.

Impact TR-2: The proposed project would not create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations. ***(Less than Significant)***

As shown in Table 1, the proposed project would generate approximately 711 person trips (inbound and outbound) on a weekday daily basis, consisting of 277 auto trips (180 vehicle trips), 25 taxi or transit network company (TNC) trips (17 vehicle trips), 135 transit trips, two private shuttle trips, 28 bicycle trips and 244 walk trips. During the p.m. peak period, the proposed project would generate an estimated 65 daily person trips, consisting of 25 auto trips (16 vehicle trips), two taxi or TNC trips (two vehicle trips), 12 transit trips, one private shuttle trip, three bicycle trips, and 22 walking trips. Although these trips would increase the level of vehicle, pedestrian and bicycling activity in the area, the additional volume would be too small relative to existing conditions to create potentially hazardous conditions for people driving, walking, or bicycling, or for public transit operations. The project would include 31 curb cuts to serve the residential units along all frontage of the project site. Given that each curb cut would serve a garage accommodating a maximum of two automobiles, and there are no bicycling facilities or transit lines operating on the streets adjacent to these curb cuts, they are not expected to create potentially hazardous conditions for people driving, walking, or bicycling, or for public transit operations.

In addition, the proposed project would not alter the existing street grid, reconfigure the intersections near the project site, or introduce other physical features that would increase hazards for people driving, walking, or bicycling, or for public transit operations. Moreover, the proposed project would provide streetscape and sidewalk improvements along the block's street frontages in accordance with the San Francisco Better Streets Plan. The improvements would include four bulb-outs, adding a sidewalk along Wayland Street, filling the trench and adding a sidewalk and curb along Bowdoin Street, landscaping, and planting approximately 33 street trees along the perimeter of the block; these modifications would likely reduce hazards for people driving, walking, or bicycling, or for public transit operations.

Based on the discussion above, operation of the proposed project would not create potentially hazardous conditions for people driving, walking, or bicycling, or for public transit operations. Therefore, impacts would be ***less than significant***, and no mitigation measures are necessary.

Impact TR-3: The proposed project would not interfere with accessibility for people walking or bicycling to and from the project site and adjoining areas, and would not result in inadequate emergency access. ***(Less than Significant)***

Implementation of the proposed project would not alter the established street grid or roadway network, permanently close any streets or sidewalks, or eliminate or reconfigure any existing bicycle routes. Therefore, pedestrian, bicycle, and emergency vehicle access would remain unchanged from existing conditions. Pedestrians, bicyclists, and emergency vehicles would continue to access the project site from all four local roadways providing access to the project site. The proposed project would remove the existing three curb cuts on Woolsey Street and establish 31 new curb cuts (12 on Bowdoin Street, eight on both Wayland and Hamilton streets, and three on Woolsey Street). The proposed curb cuts would not interfere with accessibility for people walking or bicycling to and from the project site and adjoining areas. As discussed in TR-2, the proposed project would include four new bulb-outs, add a sidewalk along Wayland Street, and fill the trench and add a sidewalk and curb along Bowdoin Street. These features would improve accessibility at the project site.

Based on the discussion above, accessibility impacts would be ***less than significant***, and no mitigation measures are necessary.

Impact TR-4: The proposed project would not substantially delay public transit. ***(Less than Significant)***

As previously described, the project site is served by the city's transit network and is located adjacent to the 54-Felton line. Other Muni bus lines that operate within 0.5 mile of the project include the 8-Bayshore, 9-San Bruno, 9R-San Bruno Rapid, 29-Sunset, and 44-O'Shaughnessy. As shown in Table 1, the proposed project would generate 197 daily vehicle trips, 18 of which would occur during the p.m. peak hour. This number of p.m. peak hour vehicle trips is below the SF Guidelines' transit delay screening criterion of 300 p.m. peak hour vehicle trips, which is the amount of traffic that could potentially substantially delay public transit vehicles operating on routes adjacent to a project site.

Based on the discussion above, the proposed project would not substantially delay public transit. Therefore, impacts on public transit would be ***less than significant***, and no mitigation measures would be required.

Impact TR-5: The proposed project would not cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network. ***(Less than Significant)***

As stated above, the existing average daily VMT for TAZ 901 is 10.5 per capita for residential uses, which is 39 percent below the existing regional VMT per capita. The project site is located in an area of San Francisco where the existing VMT is more than 15 percent below the regional VMT thresholds. In addition, the proposed project is located within 0.5 mile of numerous major transit stops, has a floor area ration greater than 0.75 (project floor area ration is between 1.48 and 1.59), and would provide 62 parking spaces at a proposed parking ratio of 1 space per unit, which is less than the 1.5 spaces per dwelling unit permitted under San Francisco Municipal Code section 151. Since the proposed project would meet one or more of the screening criteria, new residents resulting from the proposed project would not generate a substantial increase in VMT.

Based on the discussion above, impacts related to VMT would be ***less than significant***, and no mitigation measures would be required.

Impact TR-6: The proposed project would not result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, and would not substantially delay public transit. ***(Less than Significant)***

The proposed project would construct 62 dwelling units, comprised of 31 duplexes, and a 0.39-acre publicly accessible open space. Given that the proposed project is primarily low-density residential in nature, the project does not propose any on-street or off-street passenger or freight loading.

The proposed project is estimated to generate demand for one passenger loading space during the p.m. peak hour and one freight loading space during the peak hour for commercial loading. However, it is anticipated that residents would use private and shared driveways, or on-street parking spaces adjacent to the project site for passenger and commercial loading and move-in/move-out activities. There is adequate space in the private and shared driveways to accommodate the estimated passenger and freight loading demand. Should on-street parking be necessary for move-in/move-out activities, spaces would need to be reserved through the SFMTA's temporary signage program.[32] Typically, these activities occur during off-peak times, such as in the evenings and on weekends, when there are lower traffic and walking volumes in the area.

Given the multiple on- and off-street options for accommodating residential move-in/move-out activities discussed above, the proposed project would not result in a loading deficit. Therefore, this impact would be ***less than significant***, and no mitigation measures are necessary.

Impact C-TR-1: The proposed project, in combination with cumulative projects in the vicinity of the project site, would not result in cumulatively significant impacts related to transportation and circulation. ***(Less than Significant)***

The cumulative context for transportation and circulation effects is typically localized, in the immediate vicinity of the project site or at the neighborhood level. As discussed in EIR Chapter 3, Section G, the cumulative projects include two projects within 0.25 mile of the project site—one would construct an accessory dwelling unit (ADU) at 686 Colby Street, and the other would replace an existing single-family residence with a new single-family residence and two ADUs at 666 Hamilton Street. The latter would occur within one block of the project site.

Construction. Construction of these projects may overlap with construction of the proposed project; however, because of their relatively small scale, they would not substantially increase automobile traffic volumes in the area and consequently would not result in automobile/bicycle and automobile/pedestrian conflicts at intersections or driveways in the project vicinity. The combined construction-related traffic from these projects would be temporary and localized and would not result in permanent impacts on transportation and circulation. In addition, because the cumulative projects do not share any of the same roadway frontages as the proposed project and the construction time frames differ, and because of the

[32] Information about the San Francisco Municipal Transportation Agency's temporary signage permits is available at https://www.sfmta.com/permits/temporary-signage, accessed September 29, 2020.

project scale, there would be a ***less-than-significant*** impact with regard to cumulative construction transportation activities.

Potentially Hazardous Conditions and Accessibility. The proposed project and cumulative development projects would also combine to increase automobile traffic in the area, which could result in an increase in the potential for conflicts between vehicles and people walking and bicycling at intersections and driveways in the project vicinity. However, while there would be a general increase in vehicle, bicycle, and pedestrian traffic in the project vicinity, neither the proposed project nor the cumulative projects would include design features that would combine to create potentially hazardous conditions for people driving, bicycling or walking, or public transit operations. In addition, neither the proposed project nor the cumulative projects would include features that would interfere with bicycle or pedestrian accessibility or emergency access in the vicinity. Therefore, the proposed project, in combination with cumulative projects in the project vicinity, would have a ***less-than-significant*** cumulative impact on potentially hazardous conditions and accessibility.

Public Transit Delay. The proposed project and cumulative projects would also combine to increase the volume of vehicle traffic within the project vicinity. However, number of cumulative vehicle trips would remain below the SF Guidelines' transit delay screening criterion of 300 p.m. peak hour vehicle trips under cumulative conditions. Therefore, the proposed project, in combination with cumulative projects, would not result in substantial transit delay and would have ***less-than-significant*** cumulative transit impacts.

Vehicle Miles Traveled (Cumulative). VMT by its nature is largely a cumulative impact. The number and distance of vehicular trips associated with cumulative projects might contribute to the secondary physical environmental impacts associated with VMT. It is likely that no single project by itself would be sufficient in size to prevent the region or state in meeting its VMT reduction goals. Instead, a project's individual VMT contributes to cumulative VMT impacts. The department uses existing plus project level thresholds of significance based on levels at which the department does not anticipate new projects to conflict with state and regional long-term greenhouse gas emission reduction targets and statewide VMT per capita reduction targets.

Therefore, the planning department assesses whether the region is estimated to meet its long-term greenhouse gas emission reduction targets to determine if a cumulative impact would occur. If a cumulative impact would occur, the department uses a map-based screening criterion to identify types and locations of land use projects that would not exceed the same quantitative thresholds of significance described under existing plus project conditions. The analysis uses the 2040 modeling of VMT estimates to present VMT for residential, office, and retail in San Francisco and the region. The planning department uses that data and associated maps to determine whether a project site's location is below the aforementioned VMT quantitative threshold of significance, including for the other land use types described above.

The future (2040) average daily VMT per capita for residents for the nine-county San Francisco Bay Area is 16.1 miles and 9.6 miles for transportation analysis zone 901. The future average daily VMT per capita for the residential uses at the project site (9.6 miles) is approximately 40 percent lower than the regional Bay Area average (16.1 miles). Given that the proposed project and cumulative projects are in an area in which the daily averages for future 2040 residential would be more than 15 percent below the future 2040 regional averages, the proposed project would not combine with cumulative projects to cause substantial additional VMT. Therefore, this impact would be ***less than significant***, and no mitigation measures are necessary.

Loading and Parking. While there would be a general increase in parking and loading demand associated with the proposed project and cumulative projects in the project vicinity, parking and loading impacts are localized and site-specific. As discussed under Impact TR-6 and Impact TR-7, the proposed project would not result in either a parking or loading deficit. Moreover, the cumulative development projects in the project vicinity are small in scale and far enough away from the project site that they would not combine to produce a significant cumulative parking or loading impact, and the cumulative impact would be ***less than significant***.

Based on the discussion above, the proposed project in combination with cumulative projects in the project vicinity would result in ***less-than-significant*** cumulative transportation impacts.

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6. Noise

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
6. NOISE. Would the project result in:					
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	☐
b) Generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☐	☒

The project site is not located in the vicinity of or within an area covered by an airport land use plan, and is not located within 2 miles of a public airport or a public use airport or in the vicinity of a private airstrip. Therefore, topic E.6(c) is not applicable to the proposed project.

NOISE AND VIBRATION OVERVIEW

NOISE

Noise is generally defined as unwanted sound. Sound travels in the form of waves from its source, exerting a sound pressure level (referred to as "sound level") that is measured in decibels (dB). Decibels are measured on a logarithmic scale because sound pressure varies widely within the range of human hearing. Because the human ear is not equally sensitive to all sound levels, noise measurements are weighted more heavily for the

frequencies that correspond to the human ear's decreased sensitivity to extremely low and high sound levels. This method of frequency weighting is referred to as A-weighting and the units of measure are A-weighted decibels, or dBA.

Noise levels are measures of noise at a given instant in time. Environmental noise levels fluctuate over time, depending on the sources of sound that contribute to the community noise environment. Background noise levels change throughout a typical day, based on the changes in sources such as traffic, and on the addition of short-duration, single-event noise sources such as aircraft flyovers, emergency vehicle sirens, and nearby noisy motor vehicles. The time-varying characteristic of environmental noise is typically described using statistical noise descriptors such as:

- L_{eq}, used to describe noise over a specified period of time in terms of a single value, also referred to as the "average" sound level.
- L_{max}, the maximum instantaneous noise level measured over a specified period of time.
- L_{dn}, also called the day-night average noise level, averaging the A-weighted noise level during a 24-hour day, after an addition of 10dB to measured noise levels between the hours of 10 p.m. and 7 a.m. to account for greater nighttime noise sensitivity.
- CNEL, "Community Noise Equivalent Level," similar to L_{dn} but also includes an addition of 5dB to measured noise levels between 7 and 10 p.m. after the addition of 10 dB to the measured noise levels between 10 p.m. and 7 a.m. to account for greater noise sensitivity in the evening and nighttime.

For a stationary point-source, sound typically attenuates (decreases) at a rate of 6 dB for each doubling of distance (e.g., a sound level of 80 dB at 50 feet would reduce to 74 dB at 100 feet and 68 dB at 200 feet). For a line source such as traffic on a roadway, sound attenuates at a rate of approximately 3 dB for each doubling of distance for hard sites and 4.5 dB for soft sites (e.g., grass or scattered bushes and trees). Barriers such as buildings that block line of sight between the sound source and the receiver increase the attenuation of sound over an equivalent distance.

The effects of noise on people range from annoyance and interference with speech to sleep disturbance, and under extremely noisy conditions, hearing impairment. There is a wide variation in the sound levels that cause annoyance in different receivers, depending in part on the existing (ambient) noise level. Except in carefully controlled laboratory environments, a change of 1 or 2 dBA cannot be perceived. In a typical environment, a change of 3 dBA is a barely perceptible difference, a change of 5 dBA is readily perceptible, and a change of 10 dB is generally perceived as a doubling of loudness.

NOISE-SENSITIVE RECEPTORS

Some land uses and their associated users are considered more sensitive to ambient noise levels than others due to the types of activities typically involved with the land use and the amount of noise exposure (in terms of both exposure duration and insulation from noise). In general, occupants of residences, schools, daycare centers, hospitals, places of worship, and senior housing and nursing homes are considered to be sensitive receptors[33] (i.e., persons who are sensitive to noise based on their specific activities, age, health, etc.). The closest noise sensitive receptors to the project site are existing single-family residential uses across Woolsey, Hamilton, and Wayland streets, approximately 50 feet to the south, east, and north, respectively. Burton High School is approximately 600 feet southeast of the project site and Alta Vista Lower School is approximately

[33] Governor's Office of Planning and Research, *2017 General Plan Guidelines*, p. 136.

400 feet to the northwest. Additionally, St. Elizabeth's Catholic Church is located approximately 675 feet northwest of the project site. The nearest day care center is Zacil Daycare, approximately 400 feet to the east of the project site. There are no other noise-sensitive land uses within 900 feet of the project site.

Impact NO-1: Construction activities associated with the proposed project would not result in a significant temporary increase in ambient noise levels in the project vicinity in excess of established standards. ***(Less than Significant)***

The construction period for the proposed project would last approximately 24 months and would not involve construction activities at night. Construction equipment and activities would generate noise that could, at times, be considered an annoyance by occupants of nearby properties. Construction noise levels would fluctuate depending on construction phase, equipment type and duration of use, distance between noise source and affected receptor, and the presence (or absence) of barriers. Noise impacts would generally be limited to periods during demolition of the existing structures, excavation, and new foundation installation, which would occur over the first 11 months. Interior construction noise, which would occur over the subsequent 13 months, would be substantially reduced by the exterior walls of the proposed project. The site preparation and grading would require approximately 10,800 cubic yards of excavation to a maximum depth of 5 feet bgs. Approximately 6,000 cubic yards of soil would be hauled offsite and 6,000 cubic yards of clean soil would be imported. Soil export and import would require approximately 750 truck trips. Site preparation and grading would occur over an approximately 5-month period. Construction noise impacts to biological resources are discussed in Section E.14, Biological Resources.

The proposed foundation system would be slab on grade. Therefore, there would be no noise impacts associated with impact or vibratory pile driving during construction of the proposed project.

Construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code). The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA at a distance of 100 feet from the source. **Table 2** provides typical noise levels produced by various types of construction equipment that would be employed for construction of the proposed project. Impact tools (e.g., jackhammers, hoe rams, impact wrenches) are exempt from the noise ordinance (section 2907) provided they have manufacturer-recommended and city-approved mufflers for both intake and exhaust. In addition, section 2907 requires that jackhammers and pavement breakers, such as hoe rams, be equipped with manufacturer-recommended and city-approved acoustically attenuating shields or shrouds in order to be exempt from the noise ordinance limits. Given that the closest noise sensitive receptors to the project site are residences across Woolsey, Hamilton, and Wayland streets, approximately 50 feet to the south, east, and north, respectively, Table 4 also shows the anticipated dBA of construction equipment at a distance of 50 feet. Table 4 shows the hourly noise levels (L_{max}) produced by equipment proposed by the project sponsor at the 100-foot distance dictated by section 2907. Section 2907 of the city's noise ordinance prohibits operation of any powered construction equipment (non-impact), regardless of age or date of acquisition, if such operation emits noise at a level in excess of 80 dBA when measured at a distance of 100 feet from such equipment. As shown in Table 4, construction equipment used for building construction would operate within the constraints of the Section 2907 noise ordinance standards. Additionally, section 2908 of the noise ordinance prohibits construction work between 8 p.m. and 7 a.m., if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the building department.

Table 2 Typical Noise Levels from Proposed Project Construction Equipment

Construction Equipment	Noise Level (dBA, Leq at 50 feet)	Noise Level (dBA, Leq at 100 feet)
San Francisco Noise Ordinance Limit	**86 (adjusted)**	**80**
Backhoe	78	72
Compactor	83	77
Roller	80	74
Scraper	84	78
Loader	79	73
Dozer	82	76
Excavator	81	75
Grader	85	79
Dump Truck	76	70
Flatbed Truck	74	68
Concrete Truck	81	75
Forklift (gas-powered)	83	77
Generator	81	75
Air Compressor	78	72

NOTES: The above Leq noise levels are calculated assuming a 100 percent usage factor at full load (i.e., Lmax noise level 100 percent) for the 1-hour measurement period. Noise levels in **bold** exceed the San Francisco Noise Ordinance limit.

As mentioned above, the closest noise sensitive receptors to the project site are residences across Woolsey, Hamilton, and Wayland streets. Additionally, as discussed above sensitive receptors within 900 feet of the project site include Alta Vista Lower School, Burton High School, St. Elizabeth Catholic Church, and Zacil Daycare. Adjacent residences would likely experience temporary and intermittent noise increases associated with construction activities as well as the passage of construction trucks to and from the project site.

Construction of the proposed project would require the use of on-road vehicles to deliver and haul materials to and from the site. Maximum daily haul trips are anticipated to occur during the grading phase for soil export and import. The soil export and import would require approximately 750 truck trips over an approximately 3-month period, generating an average of 12 truck trips per day. Spread across the proposed 8-hour workday, maximum hourly truck trips would be approximately 1.5 per hour. The addition of 1.5 truck trips per work hour would not generate noise that would result in a perceptible increase in ambient noise levels in the vicinity. Burton High School, Alta Vista Lower School, St. Elizabeth's Catholic Church and Zacil Daycare would not likely experience any construction-related noise disturbances, given their distance from the project site, intervening hillside, and intervening buildings. Additionally, compliance with the noise ordinance would further reduce construction noise impacts.

Certain construction activities such as large concrete pours, may require earlier start or later finish times to accommodate such time-specific activities during the foundations and concrete pour stage. Concrete pours

generally occur over one-to-two nights of the overall construction period, and therefore are a very limited occurrence. Construction activities that extend beyond normal hours would be subject to review, permitting, and approval by the building department. Section 2908 of the San Francisco Police Code prohibits any person between the hours of 8 p.m. of any day and 7 a.m. of the following day from erecting, constructing, demolishing, excavating for, altering, or repairing any building or structure if the noise level created is in excess of the ambient noise level by 5 dBA at the nearest property line, unless a special permit has been applied for and granted. Nighttime construction related to the concrete pours may at times result in noise levels at the residences across Woolsey, Hamilton, and Wayland streets that exceed the ambient noise level by 5 dBA. However, this activity would occur over a one- to two-night period and be limited activity within the overall construction period. The project sponsor would receive a special permit from the director of public works or the director of the building department for noise that would exceed the ambient noise level by 5 dBA at the nearest property plane. The project sponsor would comply with all requirements of the special permit to engage in nighttime work; therefore, nighttime noise would be subject to the limits of the permit that is granted. Because any nighttime construction work would be limited to one to two days, it would not result in a significant temporary increase in ambient noise levels in the project vicinity. As such, nighttime construction noise resulting from the proposed project would be ***less than significant***.

Project-related construction activities would not expose individuals to temporary increases in noise levels substantially greater than ambient levels. Thus, noise impacts related to construction activities would be ***less than significant***.

Impact NO-2: Construction of the proposed project would not generate excessive groundborne noise or vibration levels. ***(Less than Significant)***

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Construction-related vibration primarily results from the use of impact equipment such as pile drivers (both impact and vibratory), hoe rams, vibratory compactors and jack hammers. The operation of heavy construction equipment, particularly pile-drivers and other heavy-duty impact devices (such as pavement breakers), creates seismic waves that radiate along the surface of the ground and downward. These surface waves can be felt as ground vibration and can result in effects that range from annoyance for people to damage to structures. Groundborne vibration generally attenuates rapidly with distance from the source of the vibration.

Receptors sensitive to vibration include structures (especially older masonry structures), people (especially residents, the elderly and the sick), and equipment (e.g., magnetic resonance imaging equipment, high resolution lithographic, optical and electron microscopes). In addition, vibration may disturb nesting and breeding activities for biological resources. Regarding the potential effects of groundborne vibration to people, except for long-term occupational exposure, vibration levels rarely affect human health.

The nearest sensitive uses to the project site include adjacent single-family residential uses across Woolsey, Hamilton, and Wayland streets, approximately 50 feet to the south, east, and north, respectively. The buildings consist of wood (not masonry) construction and have not been identified as historic resources. There are no sensitive equipment uses (e.g., facilities using magnetic resonance imaging equipment, high resolution lithographic, optical and electron microscopes) or biological resources near the project site.

The proposed project would not require pile driving, vibratory construction equipment, or impact equipment. Moreover, the nearest structures to the project site are not masonry structures, and therefore are not as susceptible to vibration-related damage.

Operation-related vibration primarily results from the passing of trains, buses, and heavy trucks. The proposed project would construct 62 residential units, and therefore would not contribute any operational sources of vibration to the vicinity.

For these reasons, project-related construction and operational groundborne noise or groundborne vibration impacts would be ***less than significant***.

Impact NO-3: Operation of the proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity in excess of applicable standards. ***(Less than Significant with Mitigation)***

The proposed project would add 62 residential units to the project vicinity. Vehicular traffic makes the largest contribution to ambient noise levels throughout most of San Francisco. Generally, traffic would have to double in volume to result in a noticeable 3 dBA increase in the ambient noise level in the project vicinity.[34] The proposed project would generate approximately 197 daily vehicle trips, 18 of which would occur during the p.m. peak hour. Traffic counts taken at Bowdoin Street at Woolsey Street totaled 46 vehicles during the p.m. peak hours.[35] Therefore, project-generated vehicle trips would not cause traffic volumes to double on nearby streets and as a result, project-generated traffic noise would not have a noticeable effect on ambient noise levels in the project site vicinity. This impact would be ***less than significant***.

Fixed mechanical building equipment, such as heating, ventilation and air conditioning (HVAC) systems, as well as music- or other noise-producing devices associated with the residential uses would create operational noise. The project proposes to install up to 62 rooftop condenser units,[36] one for each of the individual dwellings.[37] The specific model for these units have not yet been selected, however noise levels generated by residential air conditioning units can range from 56 to 73 dB.[38] No other exterior mechanical equipment is planned. These noise sources would be subject to the San Francisco Noise Ordinance (article 29 of the San Francisco Police Code). Specifically, section 2909(a) prohibits any person on a residential property from producing or allowing to be produced, a noise level in excess of 5 dBA above ambient noise levels at any point outside the property line. Additionally, section 2909(d) establishes maximum noise levels for fixed noise sources (e.g., mechanical equipment) of 55 dBA (from 7 a.m. to 10 p.m.) and 45 dBA (from 10 p.m. to 7 a.m.) inside any sleeping or living room in any dwelling unit located on a residential property to prevent sleep disturbance. Compliance with both of these standards are considered below.

An acoustical analysis[39] was prepared for the proposed condenser units to determine what acoustical considerations would be necessary to meet the standards of section 2909(a), and of 2909 (d). Because the

[34] United States Department of Transportation, Federal Highway Administration, *Highway Traffic Noise: Analysis and Abatement Guidance*, December 2011, p. 9, http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf, accessed September 29, 2020.
[35] San Francisco Municipal Transportation Agency, SFMTA Traffic Count Data 1995–2015, https://www.sfmta.com/reports/sfmta-traffic-count-data-1995-2015, accessed September 28, 2020. This represents the closest intersection to the project site for which recent traffic counts have been collected.
[36] A condenser unit is the outside portion of the air conditioner.
[37] Charles Salter and Associates, *770 Woolsey Street, San Francisco, California*, Preliminary Project Assessment, February 5, 2019.
[38] Carrier website technical specifications available at: https://www.carrier.com/residential/en/us/products/air-conditioners/24aca4--c/ and at: https://www.carrier.com/residential/en/us/products/air-conditioners/24vna9/, accessed May 13, 2021.
[39] Ibid.

condenser unit specifications and their locations are unknown, the acoustical analysis identified a performance standard necessary to meet the section 2909(a) and 2909(d) standards. The analysis determined that compliance with the noise ordinance would require each unit to operate at a noise level of 55 dBA at a distance of 5 feet if no shielding were installed. Given, that some units could generate noise levels up to 73 dBA, it is possible that depending on the location of such units, noise levels could exceed the existing ambient noise levels at adjacent residences by more than 5 dBA and result in a significant operational noise impact. This analysis conservatively assumes that the noise levels could exceed 45 dBA inside a sleeping room. To comply with section 2909(a), noise levels from the new rooftop condenser units must not exceed 50 dBA at any point along the property line. The project–specific acoustical analysis determined that certain design considerations would be necessary to ensure compliance with the requirements of 2909(a) and 2909(d). Therefore, operational noise from condenser units could result in noise levels exceeding the applicable ambient plus 5 dBA standard of 2909(a) (50 dBA) standard at the property line or 45 dBA interior standard of section 2909(d), which would be a significant noise impact. Implementation of **Mitigation Measure M-NO-3, Fixed Mechanical Equipment Noise Control for Building Operations**, would require the incorporation of noise attenuation measures for the condenser units.

> **Mitigation Measure M-NO-3: Fixed Mechanical Equipment Noise Control for Building Operations.** Prior to approval of a building permit, the project sponsor shall submit documentation to the Environmental Review Officer (ERO) or the officer's designee, demonstrating with reasonable certainty that the building's fixed mechanical equipment (such as heating, ventilation and air conditioning [HVAC] equipment) meets the noise limits specified in section 2909 of the noise ordinance (i.e., a 5 dB increase above the ambient noise level at the property plane for residential properties; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively). Acoustical treatments required to meet the noise ordinance may include, but are not limited to:
>
> - Enclosing noise-generating mechanical equipment;
> - Installing relatively quiet models of air handlers, condenser units, exhaust fans, and other mechanical equipment;
> - Using mufflers or silencers on equipment exhaust fans;
> - Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat) to the greatest extent feasible;
> - Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or
> - Placing barriers around the equipment to facilitate the attenuation of noise.

With implementation of **Mitigation Measure M-NO-3** potential operational impacts with respect to noise generated by fixed mechanical equipment would be ***less than significant with mitigation***.

Impact C-NO-1: The proposed project, in combination with cumulative projects, would result in less-than-significant cumulative impacts related to noise and vibration *(Less than significant)*

As described above, with identified mitigation, project-generated construction and operational noise would not substantially increase temporary or permanent ambient noise levels within the project vicinity. EIR Chapter 3, Section G, and EIR Table 3-1, p. 3-7, identifies cumulative development projects within a 0.25-mile

radius of the project site that could potentially contribute to ambient noise levels. One involves construction of a single family home and two accessory dwelling units, while the other involves construction of a single accessory dwelling unit. However, these projects are located approximately 320 and 750 feet away from the project site. Construction noise from the cumulative projects would be buffered by distance and intervening residential structures and would not substantially increase ambient noise levels at affected receptors in the project vicinity. Construction noise associated with the proposed project and cumulative development projects in the vicinity would also be subject to the noise ordinance and would be temporary in duration. Therefore, cumulative construction-related noise impacts would be less than significant.

In addition, the proposed project, in combination with the cumulative projects, would not result in a doubling of existing traffic volumes in the vicinity. The proposed project would add approximately 18 peak hour vehicle trips to the local roadway network. The two additional development projects in the vicinity would marginally increase the number of vehicle trips, but to a lesser extent than the proposed project. In addition, these additional vehicle trips would be distributed along the local street network and would not combine with all of the peak hour vehicle trips added by the proposed project to double existing traffic volumes in the vicinity. Therefore, in combination with reasonably foreseeable future cumulative projects, the proposed project would not result in significant cumulative traffic noise impacts.

The proposed project's mechanical equipment and any mechanical equipment associated with cumulative projects would be 320 feet away and 750 feet away. Therefore, due to this distance and intervening buildings, its unlikely to that the proposed project would combine with cumulative projects to result in cumulative operational noise impacts. Therefore, cumulative operational noise impacts would be less than significant.

As stated above, groundborne vibration generally attenuates rapidly with distance from the source of the vibration. The cumulative context for construction vibration impacts is the immediate area surrounding the project site. The proposed project and cumulative development projects in the vicinity are too distant from one another to combine to produce excessive vibration levels.

For these reasons, the proposed project in combination with reasonably foreseeable future projects would result in cumulative impacts related to noise and vibration that would be ***less than significant***.

7. Air Quality

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
7. AIR QUALITY. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?	☐	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐	☐

The Bay Area Air Quality Management District (air district) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (air basin), which includes: San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa Counties, and portions of Sonoma and Solano Counties. The air district is responsible for attaining and maintaining air quality in the air basin within federal and state air quality standards, as established by the federal Clean Air Act (federal clean air act) and the California Clean Air Act (clean air act), respectively. Specifically, the air district has the responsibility to monitor ambient air pollutant levels throughout the air basin and to develop and implement strategies to attain the applicable federal and state standards. The federal clean air act and the clean air act require plans to be developed for areas that do not meet air quality standards, generally.

The most recent air quality plan, the *2017 Clean Air Plan* (clean air plan), was adopted by the air district on April 19, 2017. The clean air plan updates the most recent Bay Area ozone plan, the 2010 clean air plan, in accordance with the requirements of the state Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases (GHGs) in a single, integrated plan; and establish emission control measures to be adopted or implemented. The clean air plan contains the following primary goals:

- Protect air quality and health at the regional and local scale: attain all state and national air quality standards, and eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Protect the climate: reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The clean air plan represents the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of air quality plans (checklist question E.7.a).

CRITERIA AIR POLLUTANTS

In accordance with the state and federal clean air acts, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. The air basin is designated as either in attainment or unclassified for most criteria pollutants with the exception of ozone, $PM_{2.5}$, and PM_{10},[40] for which these pollutants are designated as non-attainment for either the state or federal standards.[41] Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NOx).

By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is "considerable," then the project's impact on air quality would be considered significant.

Land use projects typically result in ozone precursor and particulate matter emissions because of increases in vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. For this reason, the air district has established significance thresholds for non-attainment criteria air pollutants, as shown in **Table 3.**

Table 3 Criteria Air Pollutants Significance Thresholds

	Construction Thresholds	Operational Thresholds	
Pollutant	Average Daily Emissions (Pounds/day)	Average Daily Emissions (Pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	None	

SOURCE: BAAQMD CEQA Guidelines, *Thresholds of Significance*, 2017.

[40] PM_{10} is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. $PM_{2.5}$, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

[41] "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant.

The significance thresholds for ROG and NOx are based on the stationary source limits in air district regulation 2, rule 2, which requires that any new source that emits criteria air pollutants above the ROG and NOx emissions limit in Table 3, must offset those emissions. The significance thresholds for particulate matter is based on the emissions limit in the federal New Source Review for stationary sources in nonattainment areas. The air district's California Environmental Quality Act Air Quality Guidelines[42] and supporting materials[43] provide additional evidence to support these thresholds. Projects that would result in criteria air pollutant emissions below these significance thresholds would not result in a cumulatively considerable net increase in non-attainment criteria air pollutants within the air basin.[44] Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction phase emissions.

Fugitive Dust. Additionally, fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices at construction sites significantly control fugitive dust[45] and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.[46] The air district has identified a number of best management practices to control fugitive dust emissions from construction activities.[47] The city's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) requires a number of measures to control fugitive dust, and the best management practices employed in compliance with the ordinance is an effective strategy for controlling construction-related fugitive dust. The ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or expose or disturb more than 10 cubic yards, or 500 square feet, of soil comply with specified dust control measures, whether or not the activity requires a permit from the building department.

LOCAL HEALTH RISKS AND HAZARDS

In addition to criteria air pollutants, individual projects may emit *toxic air contaminants*. Toxic air contaminants collectively refer to a diverse group of air pollutants that can cause chronic (i.e., of long duration) and acute (i.e., severe but short-term) adverse effects to human health, including carcinogenic effects. Human health effects of toxic air contaminants include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity; at a given level of exposure, one toxic air contaminant may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, toxic air contaminants do not have ambient air quality standards but are regulated by the air district using a risk-based approach to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated and considered together with information regarding the toxic

[42] Bay Area Air Quality Management District (air district), *California Environmental Quality Act Air Quality Guidelines*, May 2017. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed February 5, 2021.
[43] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en, accessed February 5, 2021.
[44] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.
[45] Western Regional Air Partnership, *WRAP Fugitive Dust Handbook*, September 7, 2006, http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf, accessed September 2020.
[46] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance*, October 2009, p. 27.
[47] BAAQMD, *CEQA Air Quality Guidelines*, May 2017.

potency of the substances, to provide quantitative estimates of health risks.[48] Exposures to fine particulate matter ($PM_{2.5}$) are strongly associated with mortality, respiratory diseases, and decreased lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.[49] In addition to $PM_{2.5}$, diesel particulate matter is also of concern. The California Air Resources Board (air board) identified diesel particulate matter as a toxic air contaminant in 1998, primarily based on evidence demonstrating cancer effects in humans.[50] The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other toxic air contaminants routinely measured in the region.

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 7 days a week, for 30 years.[51] Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Excess Cancer Risk. The air pollutant exposure zone includes areas where modeled cancer risk exceeds 100 incidents per million persons exposed. This criterion is based on United States Environmental Protection Agency (EPA) guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale level.[52] The 100 per 1 million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on air district regional modeling.[53]

Fine Particulate Matter. In April 2011, the EPA published the Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards, Particulate Matter Policy Assessment." In this document, EPA staff strongly support a $PM_{2.5}$ standard within the range of 12 to 11 $\mu g/m^3$.[54] The air pollutant exposure zone for San Francisco is based on the health-protective $PM_{2.5}$ standard of 11 $\mu g/m^3$, as supported by the EPA's Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards, although lowered to 10 $\mu g/m^3$ to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

Proximity to Freeways. According to the air board, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses near freeways increases both exposure to air

[48] In general, a health risk assessment is required if the air district concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

[49] San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 2008.

[50] California Air Resources Board (ARB), Fact Sheet, "The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines," October 1998.

[51] California Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spot Program Risk Assessment Guidelines*, February, 2015. Pg. 4-44, 8-6.

[52] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

[53] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines,* May 2017, page D-43.

[54] Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

pollution and the potential for adverse health effects. As evidence shows that sensitive uses in an area within a 500-foot buffer of any freeway are at an increased health risk from air pollution,[55] lots that are within 500 feet of freeways are included in the air pollutant exposure zone.

Health Vulnerable Locations. Based on the air district's evaluation of health vulnerability in the Bay Area, those zip codes (94102, 94103, 94110, 94124, and 94134) in the worst quintile of Bay Area health vulnerability scores as a result of air pollution-related causes were afforded additional protection by lowering the standards for identifying lots in the air pollutant exposure zone to: (1) an excess cancer risk greater than 90 per 1 million persons exposed, and/or (2) $PM_{2.5}$ concentrations in excess of 9 $\mu g/m^3$.[56]

The above citywide health risk modeling is referenced in the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code, article 38 (Ordinance No. 224-14, effective December 8, 2014) (article 38). The purpose of article 38 is to protect the public health and welfare by establishing an air pollutant exposure zone and imposing an enhanced ventilation requirement for all urban infill sensitive use development within that zone. The project site is not located within the air pollutant exposure zone and health code article 38 does not apply to the proposed project. In addition, projects within the air pollutant exposure zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas already adversely affected by poor air quality. The proposed project is not within an air pollutant exposure zone.

Impact AQ-1: The proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. ***(Less than Significant)***

The most recently adopted air quality plan for the air basin is the air district's 2017 clean air plan.[57] The clean air plan is a road map that demonstrates how the San Francisco Bay Area will achieve compliance with the state ozone standards and how the region will reduce the transport of ozone and ozone precursors to neighboring air basins. In determining consistency with the plan, this analysis considers whether the project would: (1) support the primary goals of the plan; (2) include applicable control measures from the plan; and (3) avoid disrupting or hindering implementation of control measures identified in the plan.

The primary goals of the clean air plan are to: (1) protect air quality and health at the regional and local scale; (2) eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and (3) protect the climate by reducing greenhouse gas emissions. To meet the primary goals, the plan recommends 85 specific control measures and actions. These control measures are grouped into various categories and include stationary and area source measures, mobile source measures, transportation control measures, land use measures, and energy and climate measures. To the extent that the air district has regulatory authority over an emissions source generated by the project, the control measures may be requirements of the proposed project. Other measures in the plan not within the air district's regulatory authority may be advisory or are otherwise not specifically applicable to land use development projects.

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[55] California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective,* April 2005, http://www.arb.ca.gov/ch/landuse.htm, accessed February 5, 2021

[56] San Francisco Planning Department and San Francisco Department of Public Health, *San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.

[57] Bay Area Air Quality Management District, Spare the Air Cool the Climate, *Final 2017 Clean Air Plan*, April 2017, https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en, accessed February 5, 2021.

The clean air plan recognizes that to a great extent, community design dictates individual travel mode, and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and greenhouse gases from motor vehicles is to channel future Bay Area growth into vibrant urban communities where goods and services are close at hand, and people have a range of viable transportation options. The control measures most applicable to the proposed project are transportation control measures and energy and climate control measures. The proposed project's impact with respect to GHGs are discussed in Section E.8, *Greenhouse Gas Emissions*, p. 53, which demonstrates that the proposed project would comply with the applicable provisions of the city's Greenhouse Gas Reduction Strategy.

The infill nature of the proposed project and high availability of viable transportation options ensure that residents could bicycle, walk, and ride transit to and from the project site instead of taking trips via private automobile. These features ensure that the project would avoid substantial growth in automobile trips and vehicle miles traveled. The proposed project's anticipated 197 new daily vehicle trips would result in a negligible increase in air pollutant emissions. Transportation control measures that are identified in the clean air plan are implemented by the *San Francisco General Plan* and the planning code, for example, through the city's Transit First Policy, transportation demand management program requirements, and transit impact development fees. Compliance with these requirements would ensure the project includes relevant transportation control measures specified in the clean air plan. Therefore, the proposed project would include applicable control measures identified in the clean air plan to meeting the plan's primary goals.

Examples of a project that could cause the disruption or delay of the plan's control measures are projects that would preclude the extension of a transit line or bike path or inhibit walkability of the surrounding area. The proposed project would add 62 dwelling units, 93 class 1 bicycle spaces, and 12 class 2 bicycle spaces to a walkable developed area near transit service. The proposed project would not preclude the extension of a transit line or bike path or hinder the implementation of transportation control measures identified in the 2017 Clean Air Plan.

For the reasons described above, the proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan, and therefore, would have a ***less-than-significant*** impact.

Impact AQ-2: The proposed project's construction activities would generate fugitive dust and criteria air pollutants, but would not result in a cumulatively considerable net increase of non-attainment criteria air pollutants within the air basin. ***(Less than Significant)***

Construction activities (short-term) typically result in emissions of ozone precursors and particulate matter in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Emissions of ozone precursors and particulate matter are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROGs are also emitted from activities that involve painting, application of other types of architectural coatings, or asphalt paving.

The proposed project would demolish the existing greenhouses and accessory buildings on the project site, which would take approximately 3 months. After demolition, debris and known contaminated soil would be removed in accordance with the soil management plan prepared for the proposed project. Construction would occur in a single phase, with no occupancy of the residential units until construction is complete. The proposed project would require approximately 10,800 cubic yards of excavation to a maximum depth of 5 feet bgs. Approximately 6,000 cubic yards of soil would be hauled offsite and 6,000 cubic yards of clean soil

would be imported. During the 24-month construction period, construction activities would have the potential to result in emissions of ozone precursors and PM, as discussed below.

FUGITIVE DUST

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and due to specific contaminants, such as lead or asbestos that may be constituents of soil. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure.

In response, the San Francisco Board of Supervisors approved the Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work in order to protect the health of the general public and of onsite workers, minimize public nuisance complaints, and to avoid orders to stop work by the department of building inspection.

The construction dust control ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specified dust control measures whether or not the activity requires a permit from the department of building inspection.[58]

For projects over 0.5 acre, such as the proposed project, the dust control ordinance requires that the project sponsor submit a dust control plan for approval by the San Francisco Department of Public Health (health department). The site-specific dust control plan would require the implementation of additional dust control measures such as installation of dust curtains and windbreaks, independent third-party inspections and monitoring, provision of a public complaint hotline, and suspension of construction during high wind conditions.

Compliance with the regulations and procedures set forth by the dust control ordinance would ensure that potential dust-related air quality impacts would be reduced to ***less than significant***.

CRITERIA AIR POLLUTANTS

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. To assist lead agencies in determining whether short-term construction-related air pollutant emissions require further analysis as to whether the project may exceed the criteria air pollutant significance thresholds shown in Table 5, p. x, the air district developed screening criteria.[59] If a proposed project meets the screening criteria, then construction of the project would result in less-than-significant criteria air pollutant impacts. A project that exceeds the screening criteria may require a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds. The CEQA Air Quality Guidelines note that the screening levels are generally representative of new development on greenfield[60] sites without any form of mitigation measures taken into

[58] The director of the department of building inspection may waive this requirement for activities on sites less than one half-acre that are unlikely to result in any visible wind-blown dust.
[59] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines,* May 2017.
[60] A greenfield site refers to agricultural or forest land or an undeveloped site earmarked for commercial, residential, or industrial projects.

consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

The proposed project would construct 62 dwelling units comprised of 31 duplexes, which is well below the construction screening criteria for a low-rise apartment building (240 dwelling units). The amount of proposed excavation, about 10,800 cubic yards of soil, exceeds the criteria air pollutant screening criterion of 10,000 cubic yards by about 800 cubic yards. Quantification of criteria air pollutant emissions for much larger development projects involving more than 100,000 cubic yards of excavation has demonstrated that emissions would be well below the maximum allowable daily construction emissions for criteria air pollutants. Since the amount of excavation for the proposed project would be well below 100,000 cubic yards, quantification of construction-related criteria air pollutant emissions for the proposed project is not required. The proposed project's construction activities would result in a ***less-than-significant*** impact related to criteria air pollutants.

Impact AQ-3: The proposed project's construction and operational activities would generate toxic air contaminants, including diesel particulate matter, which would expose sensitive receptors to substantial pollutant concentrations. ***(Less than Significant with Mitigation)***

As previously indicated, the project site is not located within the air pollutant exposure zone. Existing sensitive land uses in the project vicinity include residential, one childcare, and two school uses. The closest sensitive receptors to the project site are residences across Woolsey, Hamilton, and Wayland streets, approximately 50 feet to the south, east, and north, respectively. Burton High School is approximately 600 feet southeast of the project site and Alta Vista Lower School is approximately 400 feet to the northwest. The nearest day care center is Zacil Daycare, approximately 400 feet to the east of the project site.

CONSTRUCTION EMISSIONS

According to the California air board, off-road equipment, which includes construction equipment, was the third largest source of mobile particulate matter emissions in California in 2012, the latest year for which inventory data is available.[61]

However, a number of federal and state regulations are requiring cleaner off-road equipment, ranging from Tier 1 to Tier 4. Tier 1 emission standards were phased in between 1996 and 2000, and Tier 4 Interim and Final emission standards for all new engines have been phased in between 2008 and 2015. To meet the Tier 4 emission standards, engine manufacturers are required to produce new engines with advanced emission-control technologies. Although the full benefits of these regulations will not be realized for several years, the EPA estimated that by implementing the federal Tier 4 standards, NO_x and PM emissions will be reduced by more than 90 percent.[62]

In addition, construction activities do not lend themselves to analysis of long-term health risks because of their temporary and variable nature. As explained in the air district's CEQA Air Quality Guidelines:

> *"Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors*

[61] California Air Resources Board, 2017, 2012 Base Year Emissions, Off-Road Sources, https://ww3.arb.ca.gov/ei/emissiondata.htm, accessed February 3, 2021.
[62] USEPA, *Clean Air Nonroad Diesel Rule: Fact Sheet*, May 2004.

to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (ARB 2005). In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk."[63]

Therefore, project-level analyses of construction activities have a tendency to produce overestimated assessments of long-term health risks.

The proposed project would require construction activities over a 24-month period, which would result in short-term emissions of diesel particulate matter and other TACs. Adjacent sensitive receptors that are downwind of project construction activities are located in an area that already experiences poor air quality and project construction activities would generate additional air pollution that would affect those nearby sensitive receptors and result in a significant impact. Implementation of **Mitigation Measure M-AQ-3, Construction Air Quality**, would reduce this impact to a less-than-significant level.

While emission reductions from limiting idling, educating workers and the public, and properly maintaining equipment are difficult to quantify, other measures in the Clean Construction Ordinance, specifically the requirement for equipment with Tier 2 engines and Level 3 VDECS can reduce construction emissions of PM exhaust by 89 to 94 percent compared to equipment with engines meeting no emission standards and without a VDECS.[64] Emissions reductions from the combination of Tier 2 equipment with Level 3 VDECS has a similar diesel particulate matter reduction efficiency to that of requiring only equipment with Tier 4 Final engines. Therefore, compliance with Mitigation Measure M-AQ-3 would reduce construction emissions impacts on nearby sensitive receptors to a ***less-than-significant*** level.

> **Mitigation Measure M-AQ-3: Construction Air Quality.** The project sponsor or the project sponsor's contractor shall comply with the following:
>
> A. *Engine Requirements*.
>
> 1. All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 Interim or Tier 4 Final off-road emission standards.
> 2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.

[63] BAAQMD, *CEQA Air Quality Guidelines*, May 2017, p. 8-6.

[64] PM emissions benefits are estimated by comparing off-road PM emission standards for Tier 2 with Tiers 1 and 0. Tier 0 off-road engines do not have PM emission standards, but the United States Environmental Protection Agency's *Exhaust and Crankcase Emissions Factors for Nonroad Engine Modeling – Compression Ignition* has estimated Tier 0 engines between 50 hp and 100 hp to have a PM emission factor of 0.72 g/hp-hr and greater than 100 hp to have a PM emission factor of 0.40 g/hp-hr. Therefore, requiring off-road equipment to have at least a Tier 2 engine would result in between a 25 percent and 63 percent reduction in PM emissions, as compared to off-road equipment with Tier 0 or Tier 1 engines. The 25 percent reduction comes from comparing the PM emission standards for off-road engines between 25 hp and 50 hp for Tier 2 (0.45 g/bhp-hr) and Tier 1 (0.60 g/bhp-hr). The 63 percent reduction comes from comparing the PM emission standards for off-road engines above 175 hp for Tier 2 (0.15 g/bhp-hr) and Tier 0 (0.40 g/bhp-hr). In addition to the Tier 2 requirement, ARB Level 3 VDECSs are required and would reduce PM by an additional 85 percent. Therefore, the Clean Construction Ordinance would result in between an 89 percent (0.0675 g/bhp-hr) and 94 percent (0.0225 g/bhp-hr) reduction in PM emissions, as compared to equipment with Tier 1 (0.60 g/bhp-hr) or Tier 0 engines (0.40 g/bhp-hr).

3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas and at the construction site to remind operators of the two-minute idling limit.

4. The contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment, and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.

B. *Waivers*.

1. The Environmental Review Officer (ERO) or designee may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).

2. The ERO may waive the equipment requirements of Subsection (A)(1) if: a particular piece of Tier 4 interim or Tier 4 final off-road equipment is technically not feasible; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or, there is a compelling emergency need to use off-road equipment that is not Tier 4 compliant. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, according to table below. Emerging technologies with verifiable emissions reductions supported by substantial evidence may also be employed in lieu of the step-down schedule below.

Table M-AQ-3-1 Off-Road Equipment Compliance Step-down Schedule

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	ARB Level 3 VDECS*
2	Tier 2	ARB Level 2 VDECS
3	Tier 2	ARB Level 1 VDECS

How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor would need to meet Compliance Alternative 1. If the ERO determines that the Contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the Contractor must meet Compliance Alternative 2. If the ERO determines that the Contractor cannot supply off-road equipment meeting Compliance Alternative 2, then the Contractor must meet Compliance Alternative 3.

* ARB = air resources board
VDECS = verified diesel emissions control strategy

C. *Construction Emissions Minimization Plan.*

Before starting on-site construction activities, the contractor shall submit a Construction Emissions Minimization Plan (Plan) to the ERO for review and approval. The Plan shall state, in reasonable detail, how the contractor will meet the requirements of section A.

1. The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel use and hours of operation. For VDECS installed, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
2. The project sponsor shall ensure that all applicable requirements of the Plan have been incorporated into the contractor's contract specifications. The Plan shall include a certification statement that the contractor agrees to comply fully with the Plan.
3. The contractor shall make the Plan available to the public for review on-site during working hours. The contractor shall post at the construction site a legible and visible sign summarizing the Plan. The sign shall also state that the public may ask to inspect the Plan for the project at any time during working hours and shall explain how to request to inspect the Plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

D. *Monitoring.*

After start of construction activities, the contractor shall submit quarterly reports to the ERO documenting compliance with the Plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the Plan.

OPERATIONAL EMISSIONS

As discussed above under Impact AQ-2, the air district has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all of the screening criteria are met by a project, then the lead agency or applicant is not required to perform a detailed air quality assessment.

The proposed project would construct 62 new dwelling units comprised of 31 duplexes, which together would generate approximately 197 daily vehicle trips. The proposed project would fall below the operational criteria air pollutant screening size for low-rise apartment land uses (240 dwelling units) identified in the air district's CEQA Air Quality Guidelines. Thus, quantification of project-generated criteria air pollutant emissions is not required, since the proposed project would not exceed any of the significance thresholds for criteria air pollutants. Therefore, the proposed project would result in a ***less-than-significant*** impact with respect to criteria air pollutant emissions, and no mitigation measures are required.

Impact AQ-4: The proposed project would generate toxic air contaminants, including diesel particulate matter, but not at levels that would expose sensitive receptors to substantial air pollutant concentrations. ***(Less than Significant)***

As discussed above, the project site is not located within an air pollutant exposure zone but is in close proximity to a variety of sensitive receptors, including residences, two schools, and one daycare facility.

SOURCES OF TOXIC AIR CONTAMINANTS

The proposed 62 dwelling units would not require the use of back-up diesel generators or generate substantial on-site quantities of TACs from other sources. However, the proposed project would increase the number of daily vehicle trips in the project vicinity by 197 trips, which would increase TAC emissions in the area. The air district considers roads with less than 10,000 vehicles per day "minor, low-impact" sources that do not pose a significant health impact, even in combination with other nearby sources, and recommends that these sources be excluded from the environmental analysis. Traffic counts taken at Woolsey and Bowdoin street (the closest intersection to the project site for which recent traffic counts have been collected) totaled 452 vehicles per day, which is well below the 10,000 vehicle per day threshold.[65] Additionally, the project's contribution of 197 new daily vehicle trips to the project vicinity would be too small to contribute a substantial amount of toxic air contaminant emissions that could affect nearby sensitive receptors. Furthermore, the 197 additional vehicle trips would be distributed among the local roadway network, and not concentrated at a particular roadway segment. Therefore, an assessment of project-generated toxic air contaminants resulting from vehicle trips is not required.

SITING SENSITIVE LAND USES

The proposed project would not site residential uses, which are considered sensitive land uses for the purpose of air quality evaluation, within an Air Pollutant Exposure Zone. Therefore, impacts related to exposure to existing sources of TACs would be ***less than significant***, and no mitigation measures are required.

Impact AQ-5: The proposed project would not create objectionable odors that would affect a substantial number of people. ***(Less than Significant)***

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. During construction, diesel exhaust from construction equipment would generate some odors. However, construction-related odors would be temporary and would not persist upon project completion. Additionally, the proposed project would not introduce new sources of odors in the vicinity, as the proposed residential land use is consistent with the existing land uses in the area. Therefore, odor impacts from the proposed project would be ***less than significant***.

[65] San Francisco Municipal Transportation Agency, SFMTA Traffic Count Data 1995–2015, https://www.sfmta.com/reports/sfmta-traffic-count-data-1995-2015, accessed September 28, 2020.

Impact C-AQ-1: The proposed project, in combination with cumulative projects would result in less than significant cumulative air quality impacts. ***(Less than Significant with Mitigation)***

As discussed above, regional air pollution is by its nature largely a cumulative impact. The San Francisco Bay Area air basin, as governed by the air district, composes the geographic context for an evaluation of cumulative air quality impacts. Emissions from cumulative projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.[66] The project-level thresholds for criteria air pollutants are based on levels below which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, cumulative criteria air pollutant analysis is presented in Impacts AQ-2 and AQ-3. The remainder of this cumulative air quality analysis address cumulative health risks and odors to sensitive receptors.

As discussed above, the project site is not located in an area that already experiences poor air quality. The proposed project would add new sources of TACs (e.g., construction-related vehicle trips). The construction-related component would constitute a significant cumulative impact. However, the proposed project would be required to implement **Mitigation Measure M-AQ-3, Construction Air Quality**, which could reduce construction period emissions by as much as 94 percent and would thereby reduce the project's contribution to cumulative air quality impacts to a ***less-than-significant*** level.

8. Greenhouse Gas Emissions

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
8. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	☐

Greenhouse gas (GHG) emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from cumulative projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

[66] Bay Area Air Quality Management District (BAAQMD), California Environmental Quality Act Air Quality Guidelines, May 2017.

The air district has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared Strategies to Address Greenhouse Gas Emissions,[67] which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA guidelines. These GHG reduction actions have resulted in a 35 percent reduction in GHG emissions in 2018 compared to 1990 levels,[68] exceeding the year 2020 reduction goals outlined in the air district's 2017 Clean Air Plan, Executive Order S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).[69]

Given that the city has met the state and region's 2020 GHG reduction targets and San Francisco's GHG education goals are consistent with, or more aggressive than, the long-term goals established under order S-3-05,[70] order B-30-15,[71,72] and Senate Bill 32[73,74] the city's GHG reduction goals are consistent with order S-3-05, order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the city's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

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[67] San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, July 2017, http://sf-planning.org/strategies-address-greenhouse-gas-emissions.

[68] San Francisco Department of the Environment, *San Francisco's Carbon Footprint*, https://sfenvironment.org/carbon-footprint, accessed May 12, 2020.

[69] Executive Order S-3-05, Assembly Bill 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.

[70] Office of the Governor, Executive Order S-3-05, June 1, 2005, http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents ($MTCO_2e$)); by 2020, reduce emissions to 1990 levels (approximately 427 million $MTCO_2e$); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million $MTCO_2e$). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

[71] Office of the Governor, *Executive Order B-30-15*, April 29, 2015, https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/B-35-15.pdf, accessed May 12, 2020. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million $MTCO_2e$).

[72] San Francisco's GHG reduction goals are codified in Section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

[73] Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding Section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

[74] Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. ***(Less than Significant)***

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

The proposed project would increase the intensity of use of the site by constructing 62 dwelling units on a currently unused site. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

Compliance with the transportation management programs, and bicycle parking requirements would reduce the proposed project's transportation-related emissions. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of alternative transportation modes with zero or lower GHG emissions on a per capita basis.

The proposed project would be required to comply with the energy efficiency requirements of the city's Green Building Code, San Francisco Stormwater Management Ordinance, Water Efficient Irrigation Ordinance, Residential Water Conservation Ordinance, and Residential Energy Conservation Ordinance, which would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions.[75] Additionally, the project would be required to meet the renewable energy criteria of the Green Building Code, including renewable energy generation or green roof installation, further reducing the project's energy-related GHG emissions.

The proposed project's waste-related emissions would be reduced through compliance with the city's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, Construction and Demolition Debris Recycling Requirements, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy[76] and reducing the energy required to produce new materials.

Compliance with the city's street tree planting requirements would serve to increase carbon sequestration. Other regulations, including those limiting refrigerant emissions and the air district's wood-burning

[75] Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump and treat water required for the project.
[76] Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

regulations would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds.[77] Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.[78]

The project sponsor is required to comply with these regulations, which have proven effective as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the city has met and exceeded Executive Order S-3-05, Assembly Bill 32, and the 2017 Clean Air Plan GHG reduction goals for the year 2020. Furthermore, the city has met its 2017 GHG reduction goal of reducing GHG emissions to 25 percent below 1990 levels by 2017. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce a proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan. Therefore, because the proposed project is consistent with the city's GHG reduction strategy, it is also consistent with the GHG reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32 and the 2017 Clean Air Plan, would not conflict with these plans, and would therefore not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project would result in a ***less-than-significant*** impact with respect to GHG emissions. No mitigation measures are necessary.

9. Wind

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
9. WIND. Would the project:					
a) Create wind hazards in publicly accessible areas of substantial pedestrian use?	☐	☐	☒	☐	☐

Impact WI-1: The proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use. ***(Less than Significant)***

Wind impacts are directly related to the height, orientation, design, location, and surrounding development context of a proposed project. In addition, tall buildings and exposed structures can strongly affect the wind environment for pedestrians. Based on wind analyses for other development projects in San Francisco, a building that does not exceed a height of 85 feet generally has little potential to cause substantial changes to ground-level wind conditions.

The project site is offered protection from westerly and northwesterly winds by the University Mound Reservoir South Basin, which is approximately 45 to 65 feet above the height of the project site from its highest to lowest point along Bowdoin Street. The project site is also offered protection from the

[77] While not a GHG, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing volatile organic compound emissions would reduce the anticipated local effects of global warming.
[78] San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for 770 Woolsey Street*, October 4, 2019.

southwesterly winds by the hill along Mansell Avenue, which is more than 200 feet above that of the project site. Thus, the prevailing winds are impeded by the existing topography.

The proposed project would construct dwelling units that are 35 feet in height, which is one story taller than the existing two-story development along Woolsey, Hamilton, and Wayland streets. The greatest difference in height between the proposed project and the adjacent buildings would be less than 10 feet. The proposed project would not result in large building masses extending substantially above the heights of adjacent buildings and topography. Additionally, the proposed dwelling units would have façade and roofline articulation, reducing any wind effects. Therefore, the proposed project would not result in adverse effects on ground-level winds. Accordingly, the proposed project would result in a ***less-than-significant*** wind impact.

Impact C-WI-1: The proposed project, in combination with cumulative projects, would not result in a cumulative wind impact. ***(Less than Significant)***

EIR Chapter 3, Section G, and EIR Table 3-1, p. 3-7, identifies cumulative development projects within a 0.25-mile radius of the project site that are undergoing environmental review. The cumulative projects include development of new residential units including accessory dwelling units and a single-family home. Similar to the proposed project, the cumulative projects are offered protection from winds by the University Mound Reservoir South Basin and by the hill along Mansell Avenue, and would be below 80 feet in height. The design of the proposed project and other future developments in the neighborhood are required to comply with the applicable height and bulk requirements, as defined in the planning code. As such, the proposed project, in combination with cumulative projects proposed in the vicinity, would not substantially alter the wind patterns that could affect public areas, and cumulative wind impacts would be ***less than significant***.

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10. Shadow

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
10. SHADOW. Would the project:					
a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?	☐	☐	☒	☐	☐

Impact SH-1: The proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open space. ***(Less than Significant)***

In 1984, San Francisco voters approved an initiative known as "Proposition K, The Sunlight Ordinance," which was codified as planning code section 295 in 1985. Planning code section 295 generally prohibits new structures above 40 feet in height that would cast additional shadows on open space that is under the jurisdiction of the San Francisco Recreation and Park Commission between one hour after sunrise and one hour before sunset, at any time of the year, unless that shadow would not result in a significant adverse

effect on the use of the open space. Public open spaces that are not under the jurisdiction of the recreation and park commission, as well as private open spaces, are not subject to planning code section 295.

The proposed project would result in the construction of 62 residential units approximately 35 feet in height, which would be one story taller than the existing surrounding development. The nearest public open space to the project site is John McLaren Park, located approximately 900 feet to the west. Given the fact that the proposed project would not include buildings greater than 40 feet in height, a shadow study is not required.

The proposed project would shade portions of nearby streets and sidewalks and private property in the project vicinity at various times throughout the year. Shadows on streets and sidewalks would not exceed levels commonly expected in urban areas. Although occupants of nearby properties may regard the increase in shadow as undesirable, the limited increase in shading of private properties as a result of the proposed project would not be considered a significant impact under CEQA.

For the reasons discussed above, the proposed project would result in a ***less-than-significant*** impact with regard to shadow.

Impact C-SH-1: The proposed project, in combination with cumulative projects, would not result in a significant cumulative shadow impact. ***(Less than Significant)***

As discussed above, the proposed project would not shade any nearby public parks or open spaces. Although implementation of the proposed project and nearby cumulative development projects would add net new shadow to the sidewalks in the neighborhood, these shadows would be transitory in nature, would not substantially affect the use of the sidewalks, and would not increase shadows above levels that are common and generally expected in a densely developed urban environment. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less-than-significant*** cumulative shadow impact.

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11. Recreation

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
11. RECREATION. Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☒	☐	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐	☐

Impact RE-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. ***(Less than Significant)***

As described in Section E.2, Population and Housing, implementation of the proposed project would add approximately 146 residents to the project site. This would represent an approximately 3 percent increase over the existing population of 4,809 in census tract 259.

Parks and recreational facilities closest to the project site include McLaren Park and the Palega Recreation Center. McLaren Park, a 310-acre park owned by the San Francisco Recreation and Park Department, is located three blocks west of the project site. McLaren Park is San Francisco's second largest park and offers both active and passive recreational opportunities, including six playgrounds, five picnic areas, tennis and basketball courts, an amphitheater, a clubhouse, off-leash dog play area, golf course, reservoir, marsh, natural areas, and more than 7 miles of trails. The 6-acre Palega Recreation Center is located 3 blocks north of the site, and provides indoor and outdoor recreation space for residents, including a multi-purpose athletic field, gymnasium, outdoor basketball court, picnic area, playground, community rooms, and a community garden.

In accordance with the San Francisco Planning Code, the proposed project would provide approximately 14,890 square feet of private open space in the form of rear yards and courtyards and approximately 11,210 square feet of private shared open space referred to as "the spine" and intersecting "mews" for residents only. In addition, the proposed project would also provide an approximately 17,170-square-foot publicly accessible open space at the corner of Woolsey and Hamilton streets. Residents are also expected to use the nearby McLaren Park and Palega Recreation Center, as well as other regional open space attractions offered in the city including Golden Gate Park, the Presidio, and Lake Merced. As discussed in Section E.2, Population and Housing, the proposed project would not substantially increase the population in the vicinity. Therefore, the proposed project would not result in an increase in the use of existing regional and neighborhood parks, or other recreational facilities within the project vicinity such that substantial physical deterioration of these facilities would occur or be accelerated; therefore, proposed project's impacts on recreational facilities would be ***less than significant***.

Impact RE-2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. ***(Less than Significant)***

As described above, the proposed project would provide approximately 23,640 square feet of private open space, approximately 7,510 square feet of common open space for residents, and a 16,390-square-foot publicly accessible open space. The publicly accessible would partially offset the demand for recreational facilities. In addition, the project site is within walking distance to a McLaren Park and Palega Recreation Center. These existing recreational facilities would be able to accommodate the increase in demand for recreational resources generated by the proposed project given the relatively small number of residents anticipated under the project. Therefore, the proposed project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. This impact would be ***less than significant***, and no mitigation measures are necessary.

Impact C-RE-1: The proposed project, in combination with cumulative projects, would not result in significant impacts on recreational resources. ***(Less than Significant)***

Cumulative development in the project vicinity would result in an additional three residential units and an increase in the demand for recreational facilities and resources; however, the demand generated from the three cumulative dwelling units would be incremental and would not combine to result in cumulative impacts. The city has accounted for such growth as part of the recreation and open space element of the general plan. For these reasons, the proposed project would not combine with cumulative projects in the project vicinity to create a significant cumulative impact on recreational facilities and impacts would be ***less than significant***.

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12. Utilities and Service Systems

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
12. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Require or result in the relocation or construction of new or expanded, water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒	☐

Impact UT-1: Implementation of the proposed project would not exceed the wastewater treatment capacity of the provider that would serve the project and would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities. ***(Less than Significant)***

The SFPUC provides and operates water supply and wastewater/stormwater collection and treatment facilities for the city. Pacific Gas and Electric Company provides electricity and natural gas to the project site, and various private companies provide telecommunications facilities.

Implementation of the proposed project would incrementally increase wastewater flows from the project site due to the introduction of 146 new residents. The proposed project would incorporate water-efficient fixtures, as required by Title 24 of the California Code of Regulations and the San Francisco Green Building Ordinance. Compliance with these regulations would reduce wastewater flows and the amount of potable water used for building functions. The SFPUC's infrastructure capacity plans account for projected population and employment growth. The incorporation of water-efficient fixtures into new development is also accounted for by the SFPUC because widespread adoption can lead to more efficient use of existing capacity.

The project site contains both impervious and pervious surfaces. The proposed project would comply with the San Francisco Stormwater Management Ordinance (as codified in section 147 of the public works code), which requires the proposed project to maintain, reduce, or eliminate the existing volume and rate of stormwater runoff discharged from the project site. To achieve this objective, the proposed project would implement and install appropriate stormwater management systems that retain runoff onsite, promote stormwater reuse, and limit site discharges from entering the city's combined stormwater/sewer system. This, in turn, would limit the incremental demand on both the collection system and wastewater facilities resulting from stormwater discharges and would minimize the potential for constructing new or expanding existing stormwater drainage facilities. A stormwater control plan, required per the City's Stormwater Management Ordinance (Ordinance No. 83-10), would be designed for review and approval by the SFPUC because the proposed project would result in ground disturbance of an area greater than 5,000 square feet. The stormwater control plan would also include a maintenance agreement, signed by the project sponsor, to ensure proper care of the necessary stormwater controls. Therefore, the proposed project would not substantially increase the amount of stormwater runoff to the extent that existing facilities would need to be expanded or new facilities would need to be constructed. Impacts on stormwater infrastructure would be less than significant. For these reasons, the population increase associated with the proposed project would not require the construction of new or an expansion of existing wastewater treatment facilities.

The proposed project would result in an incremental increase in the demand for electricity, natural gas, and telecommunications; however, this modest increase would not exceed the demand expected and provided for in the project area by utility service providers. As discussed in in Impact UT-2, below, the proposed project would result in an incremental increase in the demand for water supply, but would not itself result in the need for the construction of new or expanded water treatment facilities or delivery infrastructure.

For these reasons, the utilities demand associated with the proposed project would not exceed the service capacity of the existing providers and would not require the construction of new facilities or expansion of existing facilities. Therefore, this impact would be ***less than significant***, and no mitigation measures are necessary.

Impact UT-2: Sufficient water supplies are available to serve the proposed project and reasonably foreseeable future development in normal, dry, and multiple dry years unless the Bay Delta Plan Amendment is implemented; in that event the public utilities commission may develop new or expanded water supply facilities to address shortfalls in single and multiple dry years but this would occur with or without the proposed project. Impacts related to new or expanded water supply facilities cannot be identified at this time or implemented in the near term; instead, the public utilities commission would address supply shortfalls through increased rationing, which could result in significant cumulative effects, but the project would not make a considerable contribution to impacts from increased rationing. ***(Less than Significant)***

The SFPUC adopted the 2015 Urban Water Management Plan for the City and County of San Francisco. The plan estimates that current and projected water supplies will be sufficient to meet future retail demand through 2035 under normal year, single dry-year and multiple dry-year conditions; however, if a multiple dry-year event occurs, the SFPUC would implement water use and supply reductions through its drought response plan and a corresponding retail water shortage allocation plan.

In December 2018, the State Water Resources Control Board adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, which establishes water quality objectives to maintain the health of our rivers and the Bay-Delta ecosystem (the Bay-Delta Plan Amendment). The state water board has stated that it intends to implement the Bay-Delta Plan Amendment by the year 2022, assuming all required approvals are obtained by that time. Implementation of the Bay Delta Plan Amendment would result in a substantial reduction in the SFPUC's water supplies from the Tuolumne River watershed during dry years, requiring rationing to a greater degree in San Francisco than previously anticipated to address supply shortages not accounted for in the 2015 Urban Water Management Plan.

The public utilities commission has prepared a memorandum discussing future water supply scenarios given adoption of the Bay-Delta Plan Amendment. As discussed in the memorandum, implementation of the plan amendment is uncertain for several reasons and whether, when, and the form in which the Bay Delta Plan Amendment would be implemented, and how those amendments could affect the SFPUC's water supply, is currently unknown. The memorandum estimates total shortfalls in water supply (that is, total retail demand minus total retail supply) to retail customers through 2040 under three increasingly supply-limited scenarios:

1. Without implementation of the Bay-Delta Plan Amendment wherein the water supply and demand assumptions contained in the 2015 Urban Water Management Plan and the 2009 Water Supply Agreement as amended would remain applicable.
2. With implementation of a voluntary agreement between the public utilities commission and the State Water Resources Control Board that would include a combination of flow and non-flow measures that are designed to benefit fisheries at a lower water cost, particularly during multiple dry years, than would occur under the Bay-Delta Plan Amendment).
3. With implementation of the Bay-Delta Plan Amendment as adopted.

As estimated in the public utilities commission memorandum, water supply shortfalls during dry years would be lowest without implementation and highest with implementation of the Bay-Delta Plan Amendment. Shortfalls under the proposed voluntary agreement would be between those with and without implementation of the Bay-Delta Plan Amendment.

Under these three scenarios, the public utilities commission would have adequate water to meet total retail demands through 2040 in normal years. For single dry and multiple (years 1, 2 and 3) dry years of an extended drought, the public utilities commission memorandum estimates that shortfalls of water supply relative to demand would occur both with and without implementation of the Bay-Delta Plan Amendment. Without implementation of the plan amendment, shortfalls would range from approximately 3.6 to 6.1 mgd or 5 to 6.8 percent shortfall during dry years through the year 2040.

With implementation of the Bay-Delta Plan Amendment, shortfalls would range from 12.3 mgd (15.6 percent) in a single dry year to 36.1 mgd (45.7 percent) in years seven and eight of the 8.5-year design drought based on 2025 demand levels and from 21 mgd (23.4 percent) in a single dry year to 44.8 mgd (49.8 percent) in years seven and eight of the 8.5-year design drought based on 2040 demand.

The proposed project does not require a water supply assessment under the California Water Code. Under sections 10910 through 10915 of the California Water Code, urban water suppliers like the public utilities commission must prepare water supply assessments for certain large "water demand" projects, as defined in CEQA Guidelines section 15155. The proposed would add 62 dwelling units; as such it does not qualify as a "water demand" project as defined by CEQA Guidelines section 15155(a)(1) and a water supply assessment is not required and has not been prepared for the project.

While a water supply assessment is not required, the following discussion provides an estimate of the project's maximum water demand in relation to the three supply scenarios. No single development project alone in San Francisco would require the development of new or expanded water supply facilities or require the public utilities commission to take other actions, such as imposing a higher level of rationing across the city in the event of a supply shortage in dry years. Therefore, a separate project-only analysis is not provided for this topic. The following analysis instead considers whether the proposed project in combination with both existing development and projected growth through 2040 would require new or expanded water supply facilities, the construction or relocation of which could have significant cumulative impacts on the environment. It also considers whether a high level of rationing would be required that could have significant cumulative impacts. It is only under this cumulative context that development in San Francisco could have the potential to require new or expanded water supply facilities or require the public utilities commission to take other actions, which in turn could result in significant physical environmental impacts related to water supply. If significant cumulative impacts could result, then the analysis considers whether the project would make a considerable contribution to the cumulative impact.

Based on guidance from the California Department of Water Resources and a citywide demand analysis, the public utilities commission has established 50,000 gallons per day as an equivalent project demand for projects that do not meet the definitions provided in CEQA Guidelines section 15155(a)(1). The development proposed by the project (62 dwelling units) would represent approximately 4 percent of the 500-unit limit provided in CEQA Guidelines section 15155(1)(A). In addition, the proposed project would incorporate water-efficient fixtures as required by Title 24 of the California Code of Regulations and the city's Green Building Ordinance. It is therefore reasonable to assume that the proposed project would result in an average daily demand of less than 50,000 gallons per day of water.

The public utilities commission has prepared estimates of total retail demand in five-year intervals from 2020 through 2040.[79] Assuming the project would demand no more than 50,000 gallons of water per day (or

[79] Memorandum from Steven R. Ritchie, assistant general manager, Water Enterprise, San Francisco Public Utilities Commission, to Lisa Gibson, Environmental Review Officer, San Francisco Planning Department-Environmental Planning, May 31, 2019.

0.05 mgd), **Table 4** compares this maximum with the total retail demand from 2020 through 2040. At most, the proposed project's water demand would represent a small fraction of the total projected retail water demand, ranging from 0.07 to 0.06 percent between 2020 and 2040. As such, the project's water demand is not substantial enough to require or result in the relocation or construction of new or expanded water facilities the construction or relocation of which could cause significant environmental effects.

Table 4 Proposed Project Water Demand Relative to Total Retail Demand (mgd)

	2020	2025	2030	2035	2040
Total Retail Demand	72.1	79	82.3	85.9	89.9
Total Demand of Proposed Project	0.05	0.05	0.05	0.05	0.05
Total Demand of Proposed Project as Percentage of Total Retail Demand	0.07%	0.06%	0.06%	0.06%	0.06%

Sufficient water supplies are available to serve the proposed project and reasonably foreseeable future development in normal, dry, and multiple dry years unless the Bay-Delta Plan Amendment is implemented. As indicated above, the proposed project's maximum demand would represent less than 0.06 percent of the total retail demand in 2040 when implementation of the Bay-Delta Plan Amendment would result in a retail supply shortfall of up to 49.8 percent in a multi-year drought. The public utilities commission has indicated that it is accelerating its efforts to develop additional water supplies and explore other projects that would increase overall water supply resilience in the case that the Bay-Delta Plan Amendment is implemented. The public utilities commission has identified possible projects that it will study, but it has not determined the feasibility of the possible projects, has not made any decision to pursue any particular supply projects, and has determined that the identified potential projects would take anywhere from 10 to 30 years or more to implement. The potential impacts that could result from the construction and/or operation of any such water supply facility projects cannot be identified at this time. In any event, under such a worst-case scenario, the demand for the public utilities commission to develop new or expanded dry-year water supplies would exist regardless of whether the proposed project is constructed.

Given the long lead times associated with developing additional water supplies, in the event the Bay-Delta Plan Amendment were to take effect sometime after 2022 and result in a dry-year shortfall, the expected action of the public utilities commission for the next 10 to 30 years (or more) would be limited to requiring increased rationing. As discussed in the public utilities commission memorandum, the public utilities commission has established a process through its Retail Water Shortage Allocation Plan for actions it would take under circumstances requiring rationing. The level of rationing that would be required of the proposed project is unknown at this time. Both direct and indirect environmental impacts could result from high levels of rationing. However, the small increase in potable water demand attributable to the project compared to citywide demand would not substantially affect the levels of dry-year rationing that would otherwise be required throughout the city. Therefore, the proposed project would not make a considerable contribution to a cumulative environmental impact caused by implementation of the Bay-Delta Plan Amendment. This impact would be ***less than significant*** and no mitigation measures are necessary.

Impact UT-3: The proposed project would be served by a landfill with adequate permitted capacity to accommodate the project's solid waste disposal needs and comply with all applicable statutes and regulations related to solid waste. ***(Less than Significant)***

In September 2015, the City entered into a landfill disposal agreement with Recology, Inc. for disposal of all solid waste collected in San Francisco, at the Recology Hay Road Landfill in Solano County, through September 2024 or until 3.4 million tons have been disposed, whichever occurs first. The city would have an option to renew the agreement for a period of six years or until an additional 1.6 million tons have been disposed, whichever occurs first.[80] The Recology Hay Road Landfill is permitted to accept up to 2,400 tons per day of solid waste. At that maximum permitted rate, the landfill has the capacity to accommodate solid waste until approximately 2034. Under existing conditions, the landfill receives an average of approximately 1,850 tons per day from all sources, with approximately 1,200 tons per day from San Francisco, which includes residential and commercial waste and demolition and construction debris that cannot be reused or recycled[81] (see discussion below). At the current rate of disposal, the landfill closure has operating capacity until 2041. The city's contract with the Recology Hay Road Landfill will extend until 2031 or when the city has disposed 5 million tons of solid waste, whichever occurs first. At that point, the city would either further extend the landfill contract or find and entitle an alternative landfill site.

Further, the project would be required to implement the city's Mandatory Recycling and Composting Ordinance (No. 100-09), the objective of which is to minimize the city's landfill trash generation. In compliance with this ordinance, the proposed project would be required to provide convenient facilities for the separation of recyclables, compostables, and landfill trash for its users. Occupants of the project site would be required to separate disposed material.

Project construction would generate demolition and construction waste. The city's Construction and Demolition Debris Recovery Ordinance prohibits construction and demolition material from being taken to landfill or placed in the garbage. All mixed debris must be transported by a registered hauler to a registered facility to be processed for recycling, and source separated material must be taken to a facility that recycles or reuses those materials. Additionally, materials from the original boiler house and greenhouses would be salvaged as much as possible, and used in the two rebuilt greenhouse structures, the rebuilt boiler house structure, and fencing around the publicly accessible open space.

As discussed above, the city has access to adequate landfill capacity at least through 2031 and potentially through 2041 and anticipates that an adequate alternative site will be identified at that point. On this basis, the city has adequate solid waste capacity to serve the proposed project, and the project's impact with respect to landfill capacity would be ***less than significant***, and no mitigation measures are required.

Impact UT-4: Construction and operation of the proposed project would follow all applicable statutes and regulations related to solid waste. ***(No Impact)***

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires municipalities to adopt an integrated waste management plan to establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling. Reports filed by the San Francisco Department of

[80] San Francisco Planning Department, *Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County, Final Negative Declaration, Planning Department Case No. 2014.0653*, May 21, 2015, http://sfmea.sfplanning.org/2014.0653E_Revised_FND.pdf, accessed May 2020.
[81] Ibid.

the Environment show that the city generated approximately 870,000 tons of waste material in 2000. By 2010, that figured decreased to approximately 455,000 tons. Waste diverted from landfills is defined as recycled or composted. San Francisco has a goal of 75 percent landfill diversion by 2010 and 100 percent by 2020.189 As of 2012, 80 percent of San Francisco's solid waste was being diverted from landfills, indicating that San Francisco exceeded the 2010 diversion target.[82]

San Francisco's Construction and Demolition Ordinance (Ordinance No. 27-06) requires a minimum of 65 percent of all construction and demolition debris to be recycled and diverted from landfills. Furthermore, San Francisco Ordinance No. 100-09 (the Mandatory Recycling and Composting Ordinance) requires everyone in San Francisco to separate their solid waste into recyclables, compostables, and trash. The proposed project would be subject to and would comply with San Francisco Ordinance No. 27-06, San Francisco Ordinance No. 100-09, and all other applicable statutes and regulations related to solid waste. In addition, as discussed in Section E.17: Hazards and Hazardous Materials, soils from excavation activities could be classified as a California hazardous waste. Accordingly, the proposed project would be required to follow state and federal regulations related to the disposal of hazardous wastes, and hazardous wastes would be transported to a permitted disposal or recycling facility. The proposed project would comply with all applicable local, state, and federal laws and regulations pertaining to solid waste, and there would be ***no impact***.

Impact C-UT-1: The proposed project, in combination with cumulative projects, would not result in a cumulative impact on utilities and service systems. ***(Less than Significant)***

Implementation of the proposed project, in combination with cumulative development in the project vicinity would result in an incremental increase in population, water consumption, and wastewater and solid waste generation. The SFPUC has accounted for such growth in its water demand and wastewater service projections, and the city has implemented various programs to divert solid waste from landfills. For these reasons, the proposed project would not combine with cumulative projects in the project vicinity to create a significant cumulative impact on utilities and service systems; these impacts would be ***less than significant***.

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[82] San Francisco Department of the Environment, Zero Waste FAQ, *http://www.sfenvironment.org/zerowaste/overview/zero-waste-faq*, accessed May 18, 2020.

13. Public Services

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
13. PUBLIC SERVICES. Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other public facilities?	☐	☐	☒	☐	☐

The project's impacts to parks are discussed in Section E.11, Recreation. Impacts to other public services are discussed below.

Impact PS-1: The proposed project would increase demand for police protection, fire protection, and other government services, but not to an extent that would require new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. ***(Less than Significant)***

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

The San Francisco Fire Department provides fire suppression services and unified emergency medical services and transport, including basic life support and advanced life support services in the city. The project site is within the service area of Station 42, located at 2430 San Bruno Avenue, which is 0.8 mile northeast of the project site.[83] Other stations include Station 44 (1298 Girard Street) approximately 1 mile southeast of the project site and Station 43 (720 Moscow Street) approximately 2 miles west of the project site.

As discussed in Section E.2, Population and Housing, the proposed project would add approximately 146 residents on the project site. The increased population resulting from the proposed project would be expected to increase demand for fire protection and emergency medical services. However, this increase in demand would not be substantial given the overall demand for such services on a citywide basis. Furthermore, the fire department conducts ongoing assessments of its service capacity and response times to maintain acceptable service levels, given the demand resulting from changes in population.

The fire department and the building department would review building plans to ensure that the proposed project complies with the latest California Building Code requirements for life safety measures as specified in the San Francisco Fire Code. The proposed project would be required to comply with all applicable building

[83] San Francisco Fire Department, Fire Station Locations, https://sf-fire.org/sites/default/files/FileCenter/Documents/1975-Station%20Location%20Map%20-%20w%20FS51.pdf, accessed May 18, 2020.

and fire codes, which establish requirements pertaining to fire protection systems, including but not limited to the provision of state-mandated smoke alarms, fire alarms, and sprinkler systems, fire extinguishers, required number and location of egress with appropriate distance separation, and emergency response notification systems. Because the proposed project would be required to comply with all applicable building and fire codes, and the proposed project would result in an incremental increase in demand for service and oversight, it would not result in the need for new or altered fire protection facilities, the construction of which could result in significant environmental impacts. Therefore, the proposed project would have a ***less-than-significant*** impact on fire protection and emergency services and no mitigation measures would be required.

POLICE PROTECTION SERVICES

The San Francisco Police Department provides police protection services for the city. The police department's Bayview District Station, at 201 Williams Avenue, is the nearest police station located approximately 0.9 mile northeast of the project site.[84] The proposed project would add 146 residents on the project site. This increased population resulting from the proposed project would likely increase demand for police protection services. The police department conducts ongoing assessments of its staffing and facility needs as part of the city's annual operating and capital budget process. This increase in demand would not be substantial given the overall demand for such services on a citywide basis and the low number of additional residents added to the area. As such, the proposed project would not require the construction of new or altered of police protection facilities, the construction of which could result in significant environmental impacts. Therefore, this impact would be ***less than significant***, and no mitigation measures would be required.

Impact PS-2: The proposed project would increase the population of school-aged children and the demand for school services, but not to the extent that would require new or physically altered school facilities, the construction of which could result in significant environmental impacts. ***(Less than Significant)***

The San Francisco Unified School District operates San Francisco's public schools. The project site is within the boundary of Taylor Elementary School, King Middle School, and Burton High School.[85] Under the current system, school district students are not automatically assigned to a particular school but, rather, entered into a diversity index lottery system in which families can request to be enrolled in schools anywhere in the district. The system assigns students to schools according to several factors, including parental choice, school capacity, and special program needs.[86]

To analyze the demand on schools resulting from implementation of the proposed project, estimates are made regarding the number of students that would be generated by the proposed project. In 2018, a study was conducted to evaluate variations in student generation rates between different San Francisco developments.[87] The study noted that, overall, student generation rates are affected by several factors, including the size of the unit, cost of housing (including market-rate vs. affordable units), unit occupancy type (rental vs. ownership), housing type (e.g., high-rise, townhouse, garden-style housing), and the neighborhood type. According to a 2015 enrollment study, the projected student generation rates for public

[84] San Francisco Police Department, Station Finder, https://www.sanfranciscopolice.org/your-sfpd/sfpd-stations/station-finder, accessed May 18, 2020.
[85] San Francisco Unified School District, Find My Attendance Area School, http://enrollinschool.org/lookup/address.php, accessed May 18, 2020.
[86] San Francisco Unified School District, History of the Student Assignment in the San Francisco Unified School District, 2009, https://archive.sfusd.edu/en/assets/sfusd-staff/enroll/files/SFUSD-Presentation-Handouts-1-2016-09-21.pdf, accessed May 27, 2020.
[87] Lapkoff & Gobalet Demographic Research, Inc., *Demographic Analyses and Enrollment Forecasts for the San Francisco Unified School District*, February 16, 2018, p. 2, https://archive.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf, accessed May 27, 2020.

schools are 0.25 kindergarten through 12th grade students per unit for inclusionary affordable housing and 0.10 students per unit for market-rate housing.[88] Based on this study, the project would result in approximately eight students.[89]

It is anticipated that the San Francisco Unified School District would be able to accommodate the additional eight students generated by the proposed project. For these reasons, implementation of the proposed project would not result in a substantial demand for new or altered school facilities, the construction of which could result in significant environmental impacts. Thus, the proposed project ***less than significant*** would not require the construction of new or altered school facilities and this impact would be less than significant. No mitigation measures are required.

OTHER PUBLIC SERVICES

The proposed project would also incrementally increase the demand for other governmental services and facilities, such as libraries. The San Francisco Public Library operates 27 branches throughout San Francisco, with the closest library (the Portola Branch Library) located approximately 0.4 mile northeast of the project site. As discussed in Section E.2, Population and Housing, the proposed project would add approximately 146 residents on the project site. The increased population resulting from the proposed project would be expected to increase demand on library services. However, in the context of overall citywide demand for library services, the population increase resulting from the proposed project would not be substantial. Therefore, implementation of the proposed project would not require the construction of new or altered public facilities, including library facilities, the construction of which could result in significant environmental impacts. Therefore, this impact would be ***less than significant***, and no mitigation measures would be required.

Impact C-PS-1: The proposed project, in combination with cumulative projects, would not result in a cumulative impact on public services. ***(Less than Significant)***

Cumulative development in the project vicinity, which would result in an additional three residential units, would result in an intensification of land uses and an increase in the demand for fire protection, police protection, school services, and other public services. The fire department, the police department, the school district, and other city agencies have accounted for such growth in providing public services to the residents of San Francisco. For these reasons, the proposed project would not combine with reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact on public services, and this impact would be ***less than significant***.

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[88] Ibid, p. 36.

[89] Student generation rates are calculated based on the following: of 62 units, 12 would be affordable and 50 would be market-rate, therefore (12 units x 0.25 students/unit) + (50 units x 0.10 students/unit) = 8 students.

14. Biological Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
14. BIOLOGICAL RESOURCES. 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 or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐	☐
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐	☒

The project area does not include riparian habitat or other sensitive natural communities, as defined by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service. The project area does not contain any wetlands, as defined by section 404 of the Clean Water Act. The project site is not located within the jurisdiction of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, Topics E.14(b), E.14(c), and E.14(f) will not be discussed further in this section.

Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or indirectly through habitat modifications, on any special-status species and would not interfere with the movement of native resident or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery site. *(Less than Significant with Mitigation)*

The project site is unused and contains dilapidated structures associated with the site's previous agricultural use. Vegetation at the site consists principally of non-native grasses such as wild oats (*Avena* spp.), bromes (*Bromus* spp.), forbs, and blackberry (*Rubus* spp.). Vegetation within the greenhouses on the project site includes roses (*Rosa* spp.), English ivy (*Hedera helix*), and other ornamental species presumably from the prior nursery business. Native vegetation on the site includes coyote brush (*Baccharis pilularis*) and California poppy (*Eschscholzia californica*). Due to the developed nature of the project area, only common wildlife species and birds are expected to use the project site. The nearest undeveloped areas with potential wildlife habitat are McLaren Park located 0.25 mile to the west and San Bruno Mountain State and County Park approximately 2 miles to the southeast. Due to its prior use, prior development, and perimeter fencing, the project site does not serve as a native wildlife nursery site or movement corridor for native resident or migratory fish or wildlife.

A qualified biologist reviewed the California Natural Diversity Database,[90] California Native Plant Society,[91] and U.S. Fish and Wildlife Service IPaC report[92] to review occurrences of special-status plant and wildlife species described within 5 miles of the project site. The likelihood of special-status species occurrence on the project site was considered for each species based on known species occurrences and natural history parameters, including but not limited to the species' range, habitat, foraging needs, migration routes, and reproductive requirements.

Based on a review of the site history provided in the Historic Resource Evaluation, records from the California Natural Diversity Database and California Native Plant Society databases, and current site conditions, the project site does not contain suitable habitat for any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW or U.S. Fish and Wildlife Service and there is a very low likelihood of candidate, sensitive, or special-status species on the project site. Therefore, the impacts of the proposed project on candidate, sensitive, or special-status species would be less than significant with the possible exception of impacts on nesting birds and common or special-status roosting bats, if present, which are discussed below.

Nesting and Migratory Birds. The proposed project would remove dilapidated structures associated with the site's previous agricultural use and construct 62 new dwelling units on the project site, which would add structures with windows and increased heights. This could result in an increase in bird injury or mortality in the event of a collision as structures in an urban setting may present risks for birds as they traverse their migratory paths due to building location or features. The city has adopted guidelines to address this issue and provided regulations for bird-safe design within the city.[93] The regulations establish bird-safe standards for new building construction, additions to existing buildings, and replacement façades to reduce bird

[90] California Department of Fish and Wildlife, *California Natural Diversity Database Summary Table Query for the San Francisco South USGS 7.5-minute quadrangle*, September 27, 2020.
[91] California Native Plant Society, Rare Plant Program, *Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39)*, http://www.rareplants.cnps.org, accessed September 27, 2020.
[92] U.S. Fish and Wildlife Service, *IPaC Resource List*, https://ecos.fws.gov/ipac/location/XST5KADN6RE3FDJS2FWLNCBOE4/resources, accessed September 30, 2020.
[93] San Francisco Planning Department, *Standards for Bird Safe Buildings*, 2011, https://sfplanning.org/standards-bird-safe-buildings, accessed May 18, 2020.

mortality from circumstances that are known to pose a high risk to birds and are considered to be "bird hazards."

Planning code section 139, Standards for Bird-Safe Buildings, establishes building design standards to reduce avian mortality rates associated with bird strikes. The building standards are based on two types of hazards: (1) location-related hazards where the siting of a structure inside or within 300 feet of an Urban Bird Refuge (open spaces that are 2 acres and larger and dominated by vegetation or open water) creates an increased risk to birds, and (2) feature-related hazards, which may increase risks to birds regardless of where the structure is located. For new building construction where the location-related standard would apply, the façade requirements include no more than 10 percent untreated glazing and minimal lighting. Any lighting that is used must be shielded and prevented from resulting in any uplighting. Feature-related hazards include free-standing glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments 24 square feet or larger in size. Any structure that contains these elements must treat 100 percent of the glazing.

The project site is located within 300 feet of an Urban Bird Refuge.[94] The standards for location-related hazards would therefore apply prior to the application of mitigation. In compliance with the location-related hazards requirements of the city's Standards for Bird Safe Buildings, the proposed project's façades would include no more than 10 percent untreated glazing and minimal lighting, and any lighting that would be shielded and prevented from resulting in any uplighting.

As noted above, landscaped areas within the project site could provide suitable habitat for nesting birds covered under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703–711) and the California Fish and Game Code (sections 3503 and 3503.5). If nesting birds are present, vegetation removal and construction-related activities associated with the proposed project could adversely affect bird breeding and nest behaviors at the project site and in the immediate vicinity. Common bird species that could be affected include American robin (*Turdus migratorius*), California towhee (*Melozone crissalis*), Anna's hummingbird (*Calypte anna*). Although adult birds can escape the project site to avoid direct harm during construction, eggs or chicks associated with active nests could still be permanently affected (i.e., abandoned or killed) by project construction activities. The proposed project may result in the displacement of nesting migratory birds and/or the abandonment of active nests should construction and vegetation removal occur during the typical nesting season (January 15 through August 15).

Following the reduction of potential impacts to birds through adherence to the city's Standards for Bird-Safe Buildings, implementation of **Mitigation Measure M-BI-1a: Conduct Pre-construction Surveys for Nesting Migratory Birds and Buffer Areas**, would further reduce potentially significant impacts on nesting birds covered under the MBTA and California Fish and Game Code to a less-than-significant level by ensuring project activities do not result in the loss of any active nests.

> **Mitigation Measure M-BI-1a: Conduct Pre-construction Surveys for Nesting Migratory Birds and Buffer Areas.** Nesting birds and their nests shall be protected during construction by implementation of the following measures for each construction phase:
>
> a. To the extent feasible, the project sponsor shall conduct initial activities including, but not limited to, vegetation removal, tree trimming or removal, ground disturbance, building

[94] San Francisco Planning Department, *Urban Bird Refuge*, July 23, 2014, https://sfplanning.org/sites/default/files/resources/2018-08/Urban%20Bird%20Refuge.pdf, accessed May 19, 2020.

demolition, site grading, and other construction activities that may compromise breeding birds or the success of their nests outside of the nesting season (January 15 through August 15).

b. If construction during the bird nesting season cannot be fully avoided, a qualified wildlife biologist shall conduct pre-construction nesting surveys within 14 days prior to the start of construction or demolition at areas that have not been previously disturbed by project activities or after any construction breaks of 14 days or more. Typical experience requirements for a "qualified biologist" include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities and a minimum of two years of experience in biological monitoring or surveying for nesting birds. Surveys shall be performed in publicly accessible areas within 100 feet of common bird species and within 250 feet of the project site in order to locate any active raptor (birds of prey) nests.

c. If active nests are located during the preconstruction nesting bird surveys, a qualified biologist shall evaluate if the schedule of construction activities could affect the active nests; if so, the following measures shall apply, as determined by the biologist:

    i. If construction is not likely to affect the active nest, construction may proceed without restriction; however, a qualified biologist shall regularly monitor the nest at a frequency determined appropriate for the surrounding construction activity to confirm there is no adverse effect. Spot-check monitoring frequency would be determined on a nest-by-nest basis considering the particular construction activity, duration, proximity to the nest, and physical barriers which may screen activity from the nest. The qualified biologist may revise their determination at any time during the nesting season in coordination with the planning department.

    ii. If it is determined that construction may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all project work shall halt within the buffer until a qualified biologist determines the nest is no longer in use. These buffer distances shall be equivalent to survey distances (100 feet for passerines and 250 feet for raptors); however, the buffers may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction.

    iii. Modifying nest buffer distances, allowing certain construction activities within the buffer, and/or modifying construction methods in proximity to active nests shall be done at the discretion of the qualified biologist and in coordination with the planning department, who would notify California Department of Fish and Wildlife (CDFW). Necessary actions to remove or relocate an active nest(s) shall be coordinated with the planning department and approved by CDFW.

    iv. Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest, work within the no-disturbance buffer(s) shall halt until the nest occupants have fledged.

    v. Any birds that begin nesting within the project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels, so exclusion zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist in coordination with the planning

department, who would notify CDFW. Work may proceed around these active nests as long as the nests and their occupants are not directly affected.

d. In the event inactive nests are observed within or adjacent to the project site at any time throughout the year, any removal or relocation of the inactive nests shall be at the discretion of the qualified biologist in coordination with the planning department, who would notify and seek approval from the CDFW, as appropriate. Work may proceed around these inactive nests.

Special-Status Bats. Removal of the garage/storage building and boiler house on the site could encounter one of several common or special-status bat species. Little brown bat (*Myotis lucifugus*) and fringed myotis (*Myotis thysanodes*), both common species, and Townsend's big-eared bat (*Corynorhinus townsendii*), a California species of special concern, could occupy cracks and crevices within the buildings on the project site. The buildings offer roost protection and seclusion from humans could host bat roosts.

Bats and other non-game mammals are protected in California under the California Fish and Game Code section 4150. Maternity roosts are roosts occupied by pregnant females or females with non-flying young. Non-breeding roosts are day roosts without pregnant females or non-flying young. Destruction of an occupied, non-breeding bat roost, resulting in the death of bats; disturbance that causes the loss of a maternity colony of bats (resulting in the death of young); or destruction of *hibernacula*[95] are prohibited under CEQA and would be considered a significant impact. Construction-associated noise, or increased human activity in the project area during general construction could result in behavioral alterations including the temporary avoidance of work areas by foraging bats during construction. Such temporary alteration of behavior during construction would be a less-than-significant impact.

The mortality of special-status bats resulting from direct actions (e.g., destruction of an occupied roost) or indirect actions (e.g., elevated noise or vibration which causes roost or young abandonment) attributable to project construction would be a significant impact. Additionally, common bats may establish maternity roosts in these same locations and disturbance that results in loss of a maternity colony would be a significant impact. The implementation of **Mitigation Measure M-BI-1b, Avoidance and Minimization Measures for Bats**, would reduce potential impacts on special-status bats and common bat maternity roosts to a less-than-significant level by requiring preconstruction surveys and implementing avoidance measures if potential roosting habitat or active roosts are located.

> **Mitigation Measure M-BI-1b: Avoidance and Minimization Measures for Bats.** A qualified biologist who is experienced with bat surveying techniques shall conduct a pre-construction habitat assessment of the project site to characterize potential bat habitat and identify potentially active roost sites. Typical experience requirements for a "qualified biologist" include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities, and a minimum of two years of experience monitoring or surveying for bats. No further action is required should the pre-construction habitat assessment not identify bat habitat or signs of potentially active bat roosts within the project site (e.g., guano, urine staining, dead bats, etc.).

[95] *Hibernaculum* refers to the winter quarters of a hibernating animal. Hibernacula is the plural form of the word.

The following measures shall be implemented should potential roosting habitat or potentially active bat roosts be identified during the habitat assessment in trees to be removed or buildings to be demolished under the proposed project:

1. Building demolition shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid the bat maternity roosting season and period of winter *torpor*.[96]
2. Depending on temporal guidance as defined below, the qualified biologist shall conduct pre-construction surveys of potential bat roost sites identified during the initial habitat assessment no more than 14 days prior to tree trimming/removal or building demolition.
3. If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites until the qualified biologist determines they are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site.
4. If special-status bat species or maternity or hibernation roosts are detected during these surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist in coordination with the California Department of Fish and Wildlife. Such measures may include postponing the removal of buildings, establishing exclusionary work buffers while the roost is active (e.g., 100-foot no-disturbance buffer), or other avoidance measures.
5. The qualified biologist shall be present during building demolition if potential bat roosting habitat or active bat roosts are present. Buildings with active roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit.
6. The demolition of buildings containing or suspected to contain bat roosting habitat or active bat roosts shall be done under the supervision of the qualified biologist. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.

With planning code section 139 compliance and implementation of Mitigation Measures M-BI-1a and M-BI-1b, the proposed project would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors. This impact would be ***less than significant with mitigation***.

[96] *Torpor* refers to a state of decreased physiological activity with reduced body temperature and metabolic rate.

Impact BI-2: The proposed project would not conflict with any local policies protecting biological resources, such as a tree preservation policy or ordinance. ***(Less than Significant)***

The city's Urban Forestry Ordinance, Public Works Code section 801 et seq., requires a permit from public works to remove any protected trees. Protected trees include landmark trees, significant trees, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco. As under the ordinance, "significant" trees must be located on property under the jurisdiction of the public works department, or on privately owned property with any portion of its trunk within 10 feet of a public right-of-way and satisfying at least one of the following criteria: (a) a diameter at breast height in excess of 12 inches, (b) a height in excess of 20 feet, or (c) a canopy in excess of 15 feet. The proposed project would remove the trunk of a topped pine tree and several small 6- to 8-inch diameter trees on the project site; however, the trees do not meet the criteria of a "significant" tree as specified under the ordinance. There are no landmark trees on the project site. Therefore, no on-site trees are protected under the Urban Forestry Ordinance.

The proposed project would comply with San Francisco Public Works code section 806(d)(2) requirements for street trees associated with new developments by adding 33 new street trees along the frontages of Woolsey, Bowdoin, Wayland, and Hamilton streets. Additional trees would be planted in the corner publicly accessible open space and within the residential common open space. The proposed project would not conflict with the city's local tree ordinance and this impact would be ***less than significant***. No mitigation measures are required.

Impact C-BI-1: The proposed project, in combination with cumulative projects, would not result in a significant cumulative impact related to biological resources. ***(Less than Significant)***

The project site and the surrounding area do not currently support any candidate species, wetlands as defined by section 404 of the Clean Water Act, riparian habitat, or any other sensitive natural community identified in local or regional plans, policies, or regulations. Demolition of the garage/storage building and boiler house could potentially impact several common or special-status bat species. This impact would be site-specific and mitigated to a less-than-significant level with implementation of Mitigation Measure M-BI-1b. Cumulative development projects identified in EIR Chapter 3, Section G, and EIR Table 3-1, p. 3-7, would also be subject to the requirements of the MBTA, California Fish and Game Code, and the city's bird-safe building standards and Urban Forestry Ordinance. Therefore, the proposed project would not combine with cumulative development projects to result in a cumulative impact related to biological resources and cumulative impacts would be ***less than significant***. No mitigation measures are required.

15. Geology and Soils

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
15. GEOLOGY AND SOILS. Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	☐

The proposed project would connect to San Francisco's sewer and stormwater collection treatment system and would not use a septic water disposal system. Therefore, topic E.15(e) is not applicable to the proposed project.

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project, and relies on the information and findings provided in a geotechnical investigation that was conducted for the project site and proposed project.[97] The geotechnical investigation included : review of available geologic and geotechnical data for the site vicinity, an engineering analysis of the proposed project in the context of geologic and geotechnical site conditions, a site visit, and project-specific design and construction recommendations including for the foundation(s).

The project site slopes downward in the southeast direction, from 141 to 94 feet above sea level. Subsurface data from previous geotechnical studies in the vicinity ranged from 15.8 to 90 feet bgs. The data indicates that the site is likely underlain by 2 to 6 feet of undocumented fill consisting of medium dense sand with varying amounts of silt and gravel, and stiff to hard sandy and gravelly clay. The undocumented fill is likely underlain by 8 to 20 feet of medium dense to very dense sand with variable silt and clay content. Bedrock is generally sloping down in the southeast direction from about 140 to 50 feet above sea level; therefore, corresponding to depths of about 1 to 54 feet bgs at the project site. The boring taken near the northwest corner of the project site indicate that bedrock may be 6 feet bgs. Tests performed on layers of clayey fill in the borings taken near the northwest and southwest corners of the site indicate that the clayey fill has a low to moderate expansion potential. Groundwater was encountered in the previous borings at 11 to 16 feet below the ground surface and likely slopes with the bedrock surface and fluctuates seasonally.

The major active faults in the project area are the San Andreas, San Gregorio, and Hayward faults. The closest fault segments to the project site are from the North San Andreas fault, located approximately 4.97miles to the west of the project site. The project site is not within an earthquake fault zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the project site.[98] The project site is not located within a seismic-induced landslide hazard zone.[99] Based on the results of liquefaction analyses, the preliminarily geotechnical report concluded that the potential for liquefaction and lateral spreading at the project site is low.[100]The project site is not within a locally designated slope protection area.

The proposed project would require the excavation of approximately 10,800 cubic yards to a depth of 5 feet bgs. It is anticipated that the proposed foundation system for the buildings would be slab on grade. No pile driving is proposed. As described below, the project sponsor would be required to comply with the San Francisco Building Code. As part of the building permit review process, project construction documents would be reviewed for conformance with the geotechnical investigation recommendations for the proposed project.

APPLICABLE REGULATIONS

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act). The Alquist-Priolo Act (Public Resources Code section 2621 et seq.) is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location and construction of most types of

[97] Langan Engineering, Updated Preliminary Geotechnical Evaluation 770 Woolsey Street, January 21, 2019.
[98] Ibid.
[99] San Francisco Planning Department, San Francisco General Plan, Community Safety Element, Map 4, *http://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf*, accessed March 15, 2021.
[100] Langan Engineering, Updated Preliminary Geotechnical Evaluation 770 Woolsey Street, January 21, 2019.

structures intended for human occupancy[101] over active fault traces and strictly regulates construction in the corridors along active faults (i.e., earthquake fault zones).

State Building Code Chapters 18 and 16. Chapter 18, Soils and Foundations, of the state building code provides the parameters for geotechnical investigations and structural considerations in the selection, design, and installation of foundation systems to support the loads from the structure above. Section 1803 (Geotechnical Investigations) sets forth the scope of geotechnical investigations conducted. Section 1804 (Excavation, Grading and Fill) specifies considerations for excavation, grading, and fill to protect adjacent structures and to prevent destabilization of slopes due to erosion and/or drainage. In particular, Section 1804.1 (Excavation near foundations) requires that adjacent foundations be protected against a reduction in lateral support as a result of project excavation. This is typically accomplished by underpinning or protecting said adjacent foundations from detrimental lateral or vertical movement, or both. Section 1807 (Foundation Walls, Retaining Walls, and Embedded Posts and Poles) specifies requirements for foundation walls, retaining walls, and embedded posts and poles to ensure stability against overturning, sliding, and excessive pressure, and water lift, including seismic considerations. Sections 1808 through 1810 (Foundations) specify requirements for foundation systems based on the most unfavorable loads specified in Chapter 16, Structural, for the structure's seismic design category in combination with the soil classification at the project site. The building department reviews project plans for conformance with the recommendations in project-specific geotechnical report during its review of the building permit for the project and may require additional site-specific soils report(s) through the building permit application process.

The Seismic Hazards Mapping Act of 1990 (Landslide and Liquefaction Hazard Zones). Pursuant to the Seismic Hazards Mapping Act of 1990 (seismic hazards act), the California State Geologist has designated seismic hazard zones for landslide and liquefaction hazards. These mapped areas enable cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards in order to protect public health and safety.[102]

Projects located within a seismic hazard zone for liquefaction or landslide hazard are subject to the seismic hazards act requirements, which include the preparation of a geotechnical investigation by qualified engineer and/or geologist to delineate the area of hazard and to propose measures to address any identified hazards. The local building official must incorporate the recommended measures to address such hazards into the conditions of the building permit.

San Francisco Building Code

Building Department Permit Review Process. San Francisco relies on the state and local regulatory review process for review and approval of building permits pursuant to the California Building Standards Code (California Code of Regulations, Title 24); the San Francisco Building Code, which is the state building code plus local amendments (including administrative bulletins) that supplement the state code; the building department's implementing procedures, including information sheets; and the Seismic Hazards Mapping Act of 1990 (Public Resources Code sections 2690 to 2699.6). Administrative Bulletin No. AB-82 provides

[101] With reference to the Alquist-Priolo Act, a *structure for human occupancy* is defined as one "used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year" (California Code of Regulations, Title 14, division 2, section 3601[e]).

[102] In the context of the seismic hazards act, "mitigation" refers to measures that are consistent with established practice and that will reduce seismic risk to acceptable levels, rather than the mitigation measures that are identified under the California Environmental Quality Act (CEQA) to reduce or avoid environmental impacts of a proposed project.

guidelines and procedures for structural, geotechnical, and seismic hazard engineering design review.[103] Information Sheet No. S-05 identifies the type of work for which geotechnical reports are required, such as for new construction, building additions, and grading, and report submittal requirements.[104]

Slope and Seismic Protection Hazard Zone Act (San Francisco Building Code section 106A.4.1.4).[105] As described in Information Sheet S-19,[106] the building permit must be accompanied by a geotechnical report prepared and signed by both a licensed geologist and a licensed geotechnical engineer and must identify areas of potential slope instabilities, define potential geological and geotechnical risks, and make recommendations to address these concerns. A project subject to this act is assigned a project review tier that requires additional geotechnical and structural review and may result in a third-party peer review and/or assignment to a Structural Advisory Committee as determined by the building department. The three-member Structural Advisory Committee would advise the building department on matters pertaining to the building's design and construction.[107]

San Francisco Subdivision Code. Section 1358, Preliminary Soils Report, of the city's subdivision ordinance requires that developers file soil reports indicating any soil characteristics which may create hazards, and identifying measures to avoid soil hazards and prevent grading from creating unstable slopes. The ordinance requires that a state-registered civil engineer prepare the soils report.

San Francisco Public Works Code. Section 146, Construction Site Runoff Control, requires that all construction sites must implement best management practices to minimize surface runoff erosion and sedimentation. In addition, pursuant to section 146.7, if construction activities would disturb 5,000 square feet or more of ground surface, then the project sponsor must have an Erosion and Sediment Control Plan (erosion control plan) developed and submit a project application to the San Francisco Public Utilities Commission prior to commencing construction related activities. An erosion control plan is a site-specific plan that details the use, location and emplacement of sediment and erosion control devices.

Impact GE-1: The proposed project would not exacerbate the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, liquefaction, seismically induced ground failure, or landslides. ***(Less Than Significant)***

To ensure that the potential for adverse effects related to geology and soils are adequately addressed, San Francisco relies on the state and local regulatory process for review and approval of building permits pursuant to the California Building Code and the San Francisco Building Code, which is the state building code plus local amendments that supplement the state code, including the building department's administrative bulletins. The applicable state and local regulations applicable to this project are described above.

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[103] San Francisco Department of Building Inspection, Administrative Bulletin No. AB-082, Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review, November 21, 2018. Available at https://sfdbi.org/sites/default/files/AB-082.pdf.
[104] San Francisco Department of Building Inspection, Information Sheet No. S-05, Geotechnical Report Requirements, May 7, 2019. Available at https://sfdbi.org/sites/default/files/IS%20S-05.pdf.
[105] Enacted by Ordinance No. 121-18, effective June 23, 2018.
[106] Department of Building Inspection Information Sheet No. S-19, *Properties Subject to the Slope and Seismic Hazard Zone Protection Act (SSPA) Ordinance,* October 2, 2018. Available at https://sfdbi.org/sites/default/files/IS%20S-19.pdf.
[107] San Francisco Building Code Section 105A.6 establishes and defines the process and requirements for identifying the members of the Structural Advisory Committee. The three committee members must be selected from a list of qualified engineers submitted by the Structural Engineers Association of Northern California and approved by the building department.

The proposed project would require the excavation of approximately 10,800 cubic yards to a depth of 5 feet bgs. It is anticipated that the proposed foundation system would be slab on grade. The project site may be subject to differential compaction of non-saturated sand due to earthquake vibrations. Since it is likely that variable subsurface conditions would be encountered during foundation construction (including a mix of undocumented fill, native medium-dense to dense sand, and bedrock), foundations may bear directly on native medium dense to dense sand or bedrock.

During the building department's review of a building permit application, the building department would review the construction plans for conformance with recommendations in the project-specific geotechnical report. The building permit application would be reviewed pursuant to the building department's implementation of the building code, including administrative bulletins, local implementing procedures such as the building department information sheets, and state laws, regulations, and guidelines would ensure that the proposed project would have no significant impacts related to soils, seismic, or other geological hazards.

Thus, the proposed project would result in a ***less-than-significant*** impact related to soils, seismic, or other geological hazards, and no mitigation measures are necessary.

Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion. ***(Less than Significant)***

The project site slopes downward from an elevation of approximately 145 feet above sea level at the northwest corner at Bowdoin and Wayland streets to an elevation of approximately 100 feet above sea level at the southeast corner of Woolsey and Hamilton streets and is covered with a combination of vegetation and impervious surfaces; the latter of which is generally concentrated to the south side of the site.

The proposed project would excavate the project site approximately 5 feet bgs and remove approximately 6,000 cubic yards of soil from the project site to construct the dwelling units. Erosion could occur due to soil exposure during grading and excavation of the site. However, the project sponsor and its contractor would be required to comply with section 146, Construction Site Runoff Control, of the public works code which requires all construction sites, regardless of size, to implement best management practices to minimize surface runoff erosion and sedimentation.[108] Pursuant to section 146.7, if construction activities disturb 5,000 square feet or more of ground surface, the project sponsor must develop an erosion and sediment control plan. The erosion and sediment control plan would identify best management practices to control discharge of sediment and other pollutants from entering the city's combined sewer system during construction. Compliance with section 146 of the public works code would ensure that the proposed project would not result in substantial loss of topsoil or soil erosion. Therefore, impacts related to loss of topsoil or substantial soil erosion would be ***less than significant***. No mitigation measures would be required.

[108] SFPUC, San Francisco Construction Site Runoff Control Program, available at https://sfwater.org/index.aspx?page=235.

Impact GE-3: The project site would not be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the project. ***(Less than Significant)***

The area around the project site does not include hills or cut slopes likely to be subject to landslide and as discussed under Impact GE-1, the project site is not located within a landslide zone. The proposed project would require excavation to a depth of 5 feet bgs for the proposed slab on grade foundation system.

According to the geotechnical report conducted for the proposed project, the project site is underlain by undocumented fill, native medium dense to dense sand, and bedrock. The geotechnical report concludes that the primary geotechnical concerns would be the presence of loose to medium dense sand layers at the site that have the potential to densify and settle during a major earthquake on a nearby fault; the presence of undocumented fill at the site, including moderately expansive clay and loose to medium dense sand; and the selection of an appropriate foundation system to support anticipated building loads. The geotechnical report finds that the site would not be expected to be subject to seismic ground failure, and that the potential for liquefaction and lateral spreading at the site is low. The project site may be subject to differential compaction of non-saturated sand due to earthquake vibrations. Since it is likely that variable subsurface conditions will be encountered during foundation construction (including a mix of undocumented fill, native medium dense to dense sand, and bedrock), foundations may bear directly on native medium dense to dense sand or bedrock. To reduce the potential for differential settlement, additional excavation and recompaction may be required to create more uniform foundation support. Provided the soil is adequately prepared where needed, the geotechnical report concludes that the buildings may be supported on shallow foundations bearing on engineered fill, native medium to dense sand, or bedrock. The proposed project would comply with this recommendation and the proposed buildings would be supported by a proposed slab on grade foundation system.

In addition, the proposed project would be required to comply with the mandatory provisions of the California Building Code and San Francisco Building Code. Adherence to these requirements would further ensure that the project sponsor adequately addresses any potential impacts related to unstable soils as part of the design-level geotechnical investigation that would be prepared for the proposed project. Therefore, any potential impacts related to unstable soils would be ***less than significant***, and no mitigation measures would be required.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive soil. ***(Less than Significant)***

Expansive soils are typically very fine grained with a high percentage of clay. They can damage structures and buried utilities and increase maintenance requirements. Expansive soils expand and contract in response to changes in soil moisture, most notably when nearby surface soils change from saturated to a low-moisture content condition and back again. The presence of expansive soils is typically associated with high clay content and determined based on site-specific data. The project site is underlain by undocumented fill, including moderately expansive clay. If the proposed project foundation footings are underlain by moderately expansive clay, the geotechnical report recommends that foundations should be supported below the zone of severe moisture change, which would accommodate the volume changes during seasonal fluctuations in moisture content that can cause cracking of foundations.

The San Francisco Building Code would require an analysis of the project site's potential for soil expansion impacts and, if applicable, implementation of measures to address them as part of the design-level

geotechnical investigation prepared for the proposed project. Compliance with building code requirements and implementation of the recommendations in the geotechnical report to address expansive soils would ensure that potential impacts related to expansive soils would be ***less than significant***. No mitigation measures are required.

Impact GE-5: The proposed project would not directly or indirectly destroy a unique paleontological resource or site or geologic feature. ***(Less than Significant with Mitigation)***

A unique geologic or physical feature embodies distinctive characteristics of any regional or local geologic principles, provides a key piece of information important to geologic history, contains minerals not known to occur elsewhere in the county, and/or is used as a teaching tool. The project site is currently developed with an existing building and structures associated with the previous nursery operations. No unique geologic features exist at the project site. Therefore, the proposed project would have no impact on unique geologic features.

Paleontological resources include fossilized remains or traces of animals, plants, and invertebrates, including their imprints, from a previous geological period. Paleontological resources are deposited and preserved within particular lithologic (rock) units. Lithologic units that may contain fossils include sedimentary and volcanic formations. Collecting localities and the geological formations containing those localities are also considered paleontological resources; they represent a limited, nonrenewable resource that, once destroyed, cannot be replaced. Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered have high potential for containing additional significant paleontological resources.[109]

The proposed project would require the excavation to a depth of 5 feet bgs. Bedrock is in the project vicinity at depths of 1 to 54 feet bgs, comprised of undifferentiated sedimentary deposits and likely of the Colma formation, which have a moderate potential to yield fossils.[110,111,112] Therefore, the proposed construction activities could disturb paleontological resources if such resources are present within the project site.[113]

Implementation of **Mitigation Measure M-GE-5a,** Worker Environmental Awareness Training During Ground Disturbing Construction Activities, and Mitigation Measure **M-GE-5b, Discovery of Unanticipated Paleontological Resources during Ground Disturbing Construction Activities**, would ensure that the proposed project would not cause a substantial adverse change to the scientific significance of a paleontological resource.

> **Mitigation Measure GE-5a: Worker Environmental Awareness Training During Ground Disturbing Construction Activities.** Prior to commencing construction, and ongoing throughout ground disturbing activities (e.g., excavation, utility installation, the project sponsor or their designee (herein referred as project sponsor) shall ensure that all project construction workers are trained on the contents of the Paleontological Resources Alert Sheet (Draft for Review provided), as provided by the Environmental Review Officer (ERO). The Paleontological Resources Alert Sheet

[109] Society of Vertebrate Paleontology, Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, 2010, http://vertpaleo.org/Membership/MemberEthics/SVP_Impact_Mitigation_Guidelines.aspx, accessed November 12, 2020.
[110] USGS, Bedrock-Surface Map of the San Francisco South Quadrangle, California, 1964.
[111] San Francisco Planning Department, *Preliminary Archeological Review: 770 Woolsey Street*, January 2021.
[112] Langan Engineering, Updated Preliminary Geotechnical Evaluation 770 Woolsey Street, January 21, 2019.
[113] Memorandum from Michael Burns, P.G., Environmental Science Associates, to Debra Dwyer, Principal Environmental Planner, San Francisco Planning Department, June 3, 2021.

shall be prominently displayed at the construction site, during ground disturbing activities, to provide pre-construction worker environmental awareness training regarding potential paleontological resources.

In addition, the project sponsor shall inform construction personnel of the immediate stop work procedures and other procedures to be followed if bones or other potential fossils are unearthed at the project site. As new workers that will be involved in ground disturbing activities arrive at the project site, the construction supervisor shall train them.

The project sponsor shall submit in writing (email, letter, memo) confirming the timing of the worker training) to the ERO. The letter shall confirm the project's location, the date of training, the location of the informational handout display, and the number of participants. The letter shall be transmitted to the ERO within five (5) business days of conducting the training.

Mitigation Measure M-GE-5b: Discovery of Unanticipated Paleontological Resources during Ground Disturbing Construction Activities. In the event of the discovery of an unanticipated paleontological resource during construction, the project sponsor or their designee (herein referred as project sponsor) shall ensure ground disturbing activities shall temporarily be halted within 20 feet of the find until the discovery is examined by a qualified paleontologist as recommended by the Society of Vertebrate Paleontology standards (SVP 2010) and Best Practices in Mitigation Paleontology (Murphey et al. 2019). Work within the sensitive area shall resume only when deemed appropriate by the qualified paleontologist in consultation with the Environmental Review Officer (ERO).

The qualified paleontologist shall determine: (1) if the discovery is scientifically significant; (2) the necessity for involving other responsible or resource agencies and stakeholders, if required or determined applicable; and (3) methods for resource recovery. If a paleontological resource assessment results in a determination that the resource is not scientifically important, this conclusion shall be documented in a Paleontological Evaluation Letter to demonstrate compliance with applicable statutory requirements (e.g., Federal Antiquities Act of 1906, CEQA Guidelines section 15064.5, California Public Resources Code chapter 17, section 5097.5, Paleontological Resources Preservation Act 2009). The Paleontological Evaluation Letter shall be submitted to the ERO for review within 30 days of the discovery.

If the qualified paleontologist determines that a paleontological resource is of scientific importance, and there are no feasible measures to avoid disturbing this paleontological resource, the qualified paleontologist shall prepare a Paleontological Impact Reduction Program (impact reduction program). The impact reduction program shall include measures to fully document and recover the resource of scientific importance. The qualified paleontologist shall submit the impact reduction program to the ERO for review and approval. The impact reduction program shall be submitted to the ERO for review within 10 business days of the discovery. Upon approval by the ERO, ground disturbing activities in the project area shall resume and be monitored as determined by the qualified paleontologist for the duration of such activities.

The impact reduction program shall include: (1) procedures for construction monitoring at the project site; (2) fossil preparation and identification procedures; (3) curation of paleontological resources of scientific importance into an appropriate repository; and (4) preparation of a Paleontological Resources Report (report or paleontology report) at the conclusion of ground

disturbing activities. The report shall include dates of field work, results of monitoring, fossil identifications to the lowest possible taxonomic level, analysis of the fossil collection, a discussion of the scientific significance of the fossil collection, conclusions, locality forms, an itemized list of specimens, and a repository receipt from the curation facility. The project sponsor shall be responsible for the preparation and implementation of the impact reduction program, in addition to any costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The paleontology report shall be submitted to the ERO for review within 30 business days from conclusion of ground disturbing activities, or as negotiated following consultation with the ERO.

Implementation of Mitigation Measures M-GE-5a and M-GE-5b would reduce paleontological impacts to a ***less-than-significant*** level.

Impact C-GE-1: The proposed project, in combination with cumulative projects, would not result in significant cumulative impacts on geology and soils or paleontological resources. ***(Less than Significant)***

Environmental impacts related to geology, soils, and paleontological features are generally site-specific. All development within San Francisco is subject to the seismic safety standards and design review procedures of the California and local building codes and to construction site runoff regulations of section 146 of the public works code. These regulations would ensure that cumulative effects of development on seismic safety, geologic hazards, and erosion are less than significant. For these reasons, the proposed project would not combine with cumulative projects in the project vicinity to create a significant cumulative impact related to geology and soils.

Similarly, environmental impacts related to paleontological resources are site specific. Impacts of cumulative projects would be unlikely to combine with impacts of the proposed project to result in cumulative impacts on paleontological resources. For these reasons, the proposed project would not combine with cumulative projects in the project vicinity to create a significant cumulative impact related to geology and soils, including paleontological resources or features, and cumulative impacts would be ***less than significant***.

16. Hydrology and Water Quality

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
16. HYDROLOGY AND WATER QUALITY. Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:					
i) Result in substantial erosion or siltation on- or offsite;	☐	☐	☒	☐	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	☐	☐	☒	☐	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due a project inundation?	☐	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	☐

According to SFPUC's 100-Year Storm Flood Risk Map, the project site is not located within a 100-year flood hazard area,[114] or an area identified as being subject to potential inundation in the event of a tsunami along

[114] San Francisco Public Utilities Commission, Flood Maps 100-Year Storm Flood Risk Map, https://sfwater.org/index.aspx?page=1229, July 1, 2019, accessed May 19, 2020.

the San Francisco coast.[115] Therefore, the proposed project would not create a risk related to a release of pollutants due to inundation in a flood hazard, tsunami, or seiche zone and topic E.16(d) is not applicable to the proposed project and is not discussed below.

Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. ***(Less than Significant)***

CONSTRUCTION

The proposed project would require excavation to a depth of 5 feet bgs to remove contaminated soil, recompact fill, and construct the foundation mat footings. As discussed in Section E.15, Geology and Soils, excavation activities would likely not require dewatering given that the depth of groundwater is estimated between 11 and 16 feet bgs. However, based on the geotechnical report, groundwater levels could fluctuate seasonally and if any groundwater is encountered during construction, it would be discharged into the combined stormwater and sewer system subject to the requirements of the San Francisco Sewer Use Ordinance (Ordinance No. 19-92, amended by Ordinance No. 116-97), as supplemented by the San Francisco Department of Public Works Order No. 158170. These regulations require a permit from the Wastewater Enterprise Collection System Division of the SFPUC. A permit may be issued only if an effective pretreatment system is maintained and operated. Each permit for such discharge shall contain specified water quality standards and may require the project sponsor to install and maintain meters to measure the volume of the discharge to the combined sewer system.

The proposed project would also require the demolition and fill of the two hand dug wells at the southern end of the project site. These wells are approximately 30 feet deep and no longer in use. The older well adjacent to the garage/storage building, is encased in redwood except for the near surface concrete structure, while the other is cased in concrete.[116] Demolition and fill of the wells would be subject to the requirements of article 12B of the San Francisco Health Code, which stipulates that upon the discontinuation of the operation of a well, the owner or operator shall make all reasonable efforts to prevent the contamination or pollution of the well and to minimize the safety hazards caused by the presence of the well until the well is destroyed. The project sponsor would submit an application to the health department for the destruction of the wells and comply with the standards specified in sections 818–920 in article 12B of the health code. The application would require the project sponsor to specify the materials and procedures to be used in the well destruction including how they would be filled in, and preparation of a plan for the handling and disposal of the well and extracted water from the wells.

The proposed project would involve demolition of existing structures, excavation, site preparation, and construction. Excavation, earthmoving, and grading activities would expose soil and could result in erosion and excess sediments being carried in stormwater runoff to the combined sewer system. In addition, stormwater runoff from temporary onsite use and storage of vehicles, fuels, waste, and other hazardous materials could carry pollutants to the combined stormwater/sewer system if proper handling methods are not employed.

During construction, the proposed project would be required to comply with article 4.2 of the San Francisco Public Works Code. Specifically, the proposed project would comply with section 146 by implementing an erosion and sediment control plan. The erosion and sediment control plan would identify the best

[115] City and County of San Francisco, Community Safety Element of the San Francisco General Plan, 2012, Map 5 (Tsunami Hazard Zones San Francisco), https://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf, accessed May 19, 2020.
[116] Cornerstone Earth Group, *Phase I Environmental Site Assessment and Soil Quality Evaluation*, March 1, 2017.

management practices and erosion and sedimentation control measures to prevent sediment from entering the city's combined sewer system. The construction best management practices that would most likely be implemented as part of the proposed project would address inspection and maintenance, water conservation, spill prevention and control, street cleaning, and prevention of illicit connection and discharge. These best management practices would minimize disturbance to the project site, adjacent areas, and storm drains and would retain sediment. The SFPUC's Construction Runoff Control Program staff enforces this requirement through periodic and unplanned site inspections. In addition, prior to the commencement of any land-disturbing activities, the project sponsor would be required to obtain a construction site runoff control permit.

Construction stormwater discharged to the city's combined sewer system would be subject to the requirements of article 4.1, which incorporates the requirements of the city's National Pollutant Discharge Elimination System (NPDES) permit and the federal Combined Sewer Overflow Control Policy. Stormwater drainage during construction would flow to the city's combined sewer system, where it would receive treatment at the Southeast Plant and would be discharged through an existing outfall or overflow structure in compliance with the existing pollutant discharge permit. Therefore, the project's compliance with applicable permits and regulatory requirements would reduce water quality impacts during construction and dewatering activities.

OPERATION

During operation, wastewater discharges would be related to the proposed residential use. Stormwater discharges would include runoff from streets, sidewalks, and other impervious surfaces from the project site. Wastewater and stormwater generated at the project site would be directed to the city's combined sewer system and treated to the standards of the NPDES permit for the Southeast Water Pollution Control Plant prior to discharge to the Pacific Ocean.

The proposed project would be required to implement a stormwater control plan in accordance with the city's stormwater management ordinance. The project sponsor would be required to submit a stormwater control plan for review and approval by SFPUC that complies with the Stormwater Management Requirements to ensure the proposed project meets performance measures set by SFPUC related to stormwater runoff rate and volume prior to connection to the existing combined sewer system. To meet the SFPUC's requirements, the project sponsor would be required to design and incorporate low-impact development features and best management practices within the parcel and associated private driveways to reduce the stormwater peak flow and volume from a two-year, 24-hour storm event by at least 25 percent, as required, which would reduce peak flows entering the combined sewer system during wet-weather events and minimize the potential for downstream or localized flooding.[117] Compliance with San Francisco's Stormwater Management Requirements would reduce the quantity and rate of stormwater runoff to the city's combined sewer system and improve the water quality of those discharges.

The proposed project's construction and operational activities would not result in significant water quality impacts or obstruct implementation of a water quality control plan. Furthermore, the proposed project would not violate water quality standards or release substantial additional sources of polluted runoff, or otherwise degrade water quality. Therefore, this impact would be ***less than significant***, and no mitigation measures are required.

[117] San Francisco Public Utilities Commission, *Stormwater Management Requirements and Design Guidelines*, 2016.

Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. ***(Less than Significant)***

The project site is located in the South San Francisco Groundwater Basin. This basin is not used as a potable water source and is not used for groundwater production. As discussed under Section E.15, Geology and Soils, groundwater is approximately 11 to 16 feet bgs and dewatering is unlikely to be necessary during construction. Nevertheless, if any groundwater is encountered during construction, construction dewatering would represent a temporary condition on the underlying groundwater table. The proposed project would not require long-term dewatering, and does not propose to extract any underlying groundwater supplies. For these reasons, the proposed project would not deplete groundwater supplies or substantially interfere with groundwater recharge. This impact would be ***less than significant***, and no mitigation measures are necessary.

Impact HY-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion, siltation, or flooding onsite or offsite; substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. ***(Less than Significant)***

The project site is developed with structures associated with its previous agricultural use and covered in vegetation. No streams or rivers exist at the project site. Therefore, the proposed project would not alter the course of a stream or river.

Construction activities would have the potential to result in erosion and transportation of soil particles off site through excavation and grading activities. However, as described in Section E.15, Geology and Soils, the proposed project would be required to implement best management practices to control construction site runoff.

The proposed project would alter the existing drainage pattern of the project site by demolishing a majority of the existing structures on the project site and constructing 62 residential units, associated open space and landscaping, and park space, but not in a manner that would result insubstantial erosion or flooding. The proposed project would incrementally reduce the amount of impervious surface on the project site through implementation of low-impact design measures as required by the San Francisco Stormwater Management Ordinance and Stormwater Management Requirements. Specifically, the proposed project would be required to reduce the existing stormwater rate and volume at the project site by 25 percent for a two-year 24-hour design storm with the implementation of low impact design measures. The proposed project would meet this requirement by installing vegetated sidewalk planting areas, permeable pavement, and bioretention areas or flow-through planters to manage onsite stormwater. In addition, the proposed project would plant street trees along the project's Woolsey, Bowdoin, Wayland, and Hamilton street frontages. Therefore, the proposed project would not be expected to result in substantial erosion or flooding associated with changes in drainage patterns.

As noted above under Impact HY-1, treatment would be provided pursuant to the effluent discharge standards contained in the City's NPDES permit for the plant. Moreover, during construction and operation,

the proposed project would be required to comply with all local wastewater discharge and water quality requirements. Compliance with these requirements would ensure that the proposed project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The impact of the proposed project related to potential erosion or flooding and runoff would be ***less than significant***, and no mitigation measures are required.

Impact HY 4: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. ***(Less than Significant)***

As discussed under Impacts HY-1 through HY-3, the proposed project would be required to comply with existing water quality, dewatering, and drainage control regulations. In addition, the proposed project would not increase the amount of impervious surface at the site so as to interfere substantially with groundwater recharge. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be ***less than significant***, and no mitigation measures are necessary.

Impact C-HY-1: The proposed project, in combination with cumulative projects, would not result in cumulative impacts on hydrology and water quality. ***(Less than Significant)***

As discussed above, the proposed project would not result in any significant impacts with respect to hydrology and water quality during construction or operation with implementation of and compliance with applicable regulatory requirements for hydrology and water quality. In addition, impacts on hydrology and water quality, such as the release of stormwater pollutants during construction activities, groundwater supply and recharge, and the addition of wastewater and stormwater to the combined sewer system, as a result of implementation of the proposed project would be less than significant.

Since the proposed project and all future projects within San Francisco would be required to comply with the existing water quality, dewatering, and drainage control requirements described above, cumulative contributions to erosion, siltation and water pollution in the site vicinity would not be substantial and peak stormwater drainage rates and volumes resulting from design storms would gradually decrease over time with the implementation of new, conforming development projects. In addition, San Francisco's limited current use of groundwater would preclude any significant adverse cumulative effects to groundwater levels. Therefore, the proposed project would not combine with cumulative development projects to create a significant cumulative impact related to hydrology and water quality, and thus, cumulative impacts would be ***less than significant***.

17. Hazards and Hazardous Materials

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
17. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☐	☒

The project site is not located within an airport land use plan area or in the vicinity of a private airstrip, or in an area susceptible to wildland fire. The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.[118] Therefore, topics E.17(e) and E.17(g) are not applicable to the proposed project.

[118] California Department of Forestry and Fire Protection, San Francisco County Draft Fire Hazard Severity Zones in Local Responsibility Areas Map, October 5, 2007, http://frap.fire.ca.gov/webdata/maps/san_francisco/fhszl06_1_map.38.pdf.

Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. *(Less than Significant)*

Hazardous wastes that may be generated during project construction could include: (1) excavated soil that is considered hazardous under federal and state regulations or (2) spent and unspent hazardous materials use from construction. The handling and disposal of contaminated soil is addressed in Impact HZ-2 below.

Construction activities would require the use and storage of limited quantities of hazardous materials such as fuels, oils solvents, paints, and other common construction materials. Transportation of hazardous materials to and from the project site would occur on designated hazardous materials routes, by licensed hazardous materials handlers, as required, and would be subject to regulation by the California Highway Patrol and the California Department of Transportation. Compliance with these regulations would reduce any risk from the routine transport, use, or disposal of hazardous materials to a less-than-significant level.

The proposed project's residential uses and publicly accessible open space uses would involve the use of relatively small quantities of common types of hazardous materials such as cleaners, disinfectants, pesticides, and herbicides. These products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. Most of these materials are consumed through use, resulting in relatively little waste. For these reasons, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact would be ***less than significant***, and no mitigation measures would be required.

Impact HZ-2: The proposed project is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5, and the proposed project would not 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. *(Less than Significant)*

The project site is located in an area subject to San Francisco Health Code article 22A (also known as the Maher Ordinance), meaning that it is known or suspected to contain contaminated soil and/or groundwater.[119] The goal of the Maher Ordinance is to protect public health and safety by requiring appropriate handling, treatment, disposal and when necessary, remediation of contaminated soils that are encountered in the building construction process. Projects that disturb 50 cubic yards or more of soil that are located on sites with potentially hazardous soil or groundwater are subject to this ordinance. The proposed project would require excavation to a depth of 5 feet bgs and the disturbance of approximately 10,800 cubic yards of soil. Therefore, the proposed project is subject to the Maher Ordinance, which is administered and overseen by the health department.

In compliance with health code article 22A, the project sponsor has enrolled in the Maher program and submitted a phase I site assessment (site assessment) to the health department.[120,121] The site assessment identified the site's previous uses and conducted a soil investigation that sampled and analyzed soil samples for various chemicals.[122] The site assessment notes that a regulatory agency database report (EDR Report)

[119] San Francisco Planning Department, San Francisco Property Information Map, https://sfplanninggis.org/pim/map.html?layers=Maher%20Ordinance, accessed April 27, 2020.
[120] The project sponsor submitted the Maher Application to the San Francisco Department of Public Health in accordance with San Francisco Health Code article 22A on April 30, 2020.
[121] Cornerstone Earth Group, *Phase I Environmental Site Assessment and Soil Quality Evaluation*, March 1, 2017.
[122] Cornerstone Earth Group, *Phase I Environmental Site Assessment and Soil Quality Evaluation*, March 1, 2017.

indicates that the project site is identified in the City and County of San Francisco's Underground Storage Tank database, in the Statewide Environmental Evaluation and Planning System (SWEEPS) Underground Storage Tank database, and in the Facility Inventory Database (FID) Underground Storage Tank database. One 2,000-gallon underground storage tank is noted to have been present on-site and removed in 1989 under the health department's oversight. The underground storage tank historically provided fuel for the on-site boiler and the analyses of soil show that this prior underground storage tank does not appear to have impacted the site.[123] The site assessment states that based on information presented in the databases, no nearby off-site spill incidents were reported that would impact soil, soil vapor, or groundwater beneath the site.[124]

According to the site assessment, the wood-frame storage structure at the southern portion of the project site (garage/storage building) contained two vehicles,[125] two unlabeled and empty 55-gallon drums, an above ground steel tank with a capacity of approximately 55 gallons, and other miscellaneous items. The smaller wood-framed shed adjacent to the east of the garage/storage building was used for storing and mixing pesticides during the site's nursery operations. Two steel above ground storage tanks, pumps, and associated piping are also present in this shed. The site assessment notes that the pesticides mixed in this shed were pumped via below-ground piping that exited the shed leading north along the central aisle between the greenhouses. Along the aisle, the below ground piping connected to above-grade hose bibs. Flexible hoses were connected to the hose bibs to spray the roses within the greenhouses. Two exterior above ground storage tanks are adjacent to the pesticide storage shed; the larger above ground storage tank was installed to replace two water tanks that were removed and the smaller above ground storage tank was a water pressure tank associated with the irrigation system. A non-operational, natural gas fueled boiler that was operated using fuel stored within the previously removed 2,000-gallon underground storage tank is located within the boiler house. One steel above ground storage tank is located within the boiler house and another above ground storage tank is discarded near the southern fence line; these two above ground storage tanks were used for condensation collection during operation of the steam boiler system.

A concrete mixing tank with a paddle mixer extending into the top of the tank is located north of the boiler house. This tank was used for mixing of pesticides prior to installation of the steel pesticide mixing tanks in the mixing shed described above.

Twenty-four soil samples were collected from the following areas on the site as part of the site assessment: in the greenhouse areas, central aisle between the greenhouses, adjacent to the foundation of the garage/storage building, adjacent to the foundation of the mixing shed, interior of the mixing shed, undeveloped area on the southeast portion of the site, adjacent to the concrete pesticide mixing tank, and adjacent to the foundation of the boiler house. The soil samples were analyzed for organochlorine pesticides and pesticide-related metals including lead, arsenic, and mercury. Based on representative soil sample analytical results, the site assessment concludes the following:

- In 18 of the 24 samples, detected lead concentrations exceed the residential screening level.[126]

[123] Ibid.
[124] Ibid.
[125] As of this writing and according to the project sponsor, there is now only one deteriorated vehicle in the garage/storage building. Theuer, Maya, Project Manager, L37 Partners, e-mail correspondence with Susan Yogi, Senior Managing Associate, Environmental Science Associates, March 18, 2021.
[126] Residential screening levels are used to screen sites for potential human health concerns where releases of chemicals to soil have occurred. Screening levels are not de facto cleanup standards and not applied as such. The screening level's role in site screening is to help identify areas, contaminants, and conditions that require further attention and identify initial cleanup goals at a particular site.

- Chlordane (an organochlorine compound used as pesticide) concentrations exceed the residential screening level in five samples, with the greatest concentrations identified at the mixing shed.
- Three soil samples collected near the boiler house exceed the respective residential screening levels for dichloro-diphenyl-dichloroethane (DDD), dichloro-diphenyldichloro-ethylene (DDE), and dichloro-diphenyl-trichloroethane (DDT) concentration, all of which are organochlorine compounds used as pesticides.
- Six soil samples exceed the concentrations for total DDT or chlordane concentrations at which soil is considered hazardous waste for waste disposal classification purposes.

The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare an environmental site assessment that meets the requirements of San Francisco Health Code section 22.A.6. The site assessment must determine whether hazardous substances may be present on the site at levels that exceed health risk levels or other applicable standards established by California Environmental Protection Agencies, the Regional Water Quality Control Board, and the Department of Toxics Substances Control (Cal/EPA). If so, the project sponsor is required to conduct soil and/or groundwater sampling and analysis under a work plan approved by the health department. Where such analysis reveals the presence of hazardous substances that exceed Cal/EPA public health risk levels given the intended use, the project sponsor must submit a site mitigation plan to the health department. The site mitigation plan must identify the measures that the project sponsor will take to assure that the intended use will not result in public health or safety hazards in excess of the acceptable public health risk levels established by Cal/EPA or other applicable regulatory standards. The site mitigation plan also must identify any soil and/or groundwater sampling and analysis that it recommends the project sponsor conduct following completion of the measures to verify that remediation is complete. If the project sponsor chooses to mitigate public health or safety hazards from hazardous substances through land use or activity restrictions, the project sponsor must record a deed restriction specifying the land use restrictions or other controls that will assure protection of public health or safety from hazards substances remaining on the site.

Compliance with health code article 22A and the related regulations identified above would ensure that project activities that disturb or release of hazardous substances that may be present at the project site would not expose construction workers or users of the site to unacceptable risk levels for the intended project uses.

HAZARDOUS SOIL

During construction, particularly during excavation and grading, construction workers and nearby residents could be exposed to chemicals in the soil through inhalation of airborne dust or vapors if proper precautions are not implemented. Soil adjacent to structures that are painted with lead-containing paint can become impacted with lead as a result of weathering and/or peeling of painted surfaces.[127] As described above, the total DDT or chlordane concentrations at the site also exceed residential screening levels from prior pesticide use. The results of soil sampling performed at the project site indicate that the greatest concentrations of lead and organochlorine pesticides were generally identified near the existing on-site structures including the boiler house, garage/storage building, and the mixing shed.[128]

[127] Cornerstone Earth Group, *Phase I Environmental Site Assessment and Soil Quality Evaluation*, March 1, 2017, p. 16.
[128] Ibid.

To comply with various regulatory requirements, the health department would require the project sponsor to submit a site mitigation plan that includes measures to mitigate potential risks to the environment and to protect construction workers, nearby residents, workers, and/or pedestrians from potential exposure to hazardous substances and underground structures during soil excavation and grading activities. Specified construction procedures at a minimum must comply with building code section 106A.3.2.6.3 and health code article 22B related to construction dust control; and public works code section 146 et seq. concerning construction site runoff control. Additional measures would typically include notification, field screening, and worker health and safety measures to comply with Cal/OSHA requirements.

As noted above, several above ground storage tanks are present on the project site. The health department would require any discovered aboveground and underground storage tanks to be closed pursuant to article 21 of the health code and comply with applicable provisions of chapters 6.7 and 6.75 of the California Health and Safety Code (commencing with section 25280) and its implementing regulations.

Given the age of the structures and results of the soil sampling results, the demolition of the structures and excavation activities could result in disturbance of lead paint. Therefore, the proposed project must comply with section 3426 of the San Francisco Building Code, Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures. The ordinance contains performance standards, including establishment of containment barriers, at least as effective at protecting human health and the environment as those in the U.S. Department of Housing and Urban Development Guidelines (the most recent Guidelines for Evaluation and Control of Lead-Based Paint Hazards) and identifies prohibited practices that may not be used in disturbances or removal of lead-based paint.

The ordinance also includes notification requirements and requirements for signs. Prior to the commencement of work, the project sponsor must provide written notice to the director of the building department

The proposed demolition would also be subject to the occupational safety and health administration's Lead in Construction Standard (8 CCR section 1532.1). This standard requires development and implementation of a lead compliance plan when materials containing lead would be disturbed during construction. Implementation of procedures required by the building code and the Lead in Construction Standard would ensure that potential impacts of demolition or renovation of structures with lead-based paint would be less than significant.

ASBESTOS-CONTAINING MATERIALS

The project site contains structures that were constructed between the 1920s and 1960s. The proposed project would include demolition of these structures, and materials from the original boiler house and greenhouses would be salvaged as much as possible. Based on the dates of construction of the various buildings, asbestos-containing materials may be present in building materials that could become airborne as a result of demolition disturbance.

The California Department of Toxic Substance Control considers asbestos hazardous, and removal of asbestos-containing materials is required prior to demolition or construction activities that could result in disturbance of these materials. Asbestos-containing materials must be removed in accordance with local and state regulations, air district, Cal/OSHA, and California Department of Health Services requirements. Specifically, section 19827.5 of the California Health and Safety Code requires that local agencies not issue

demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

The California legislature vests the air district with the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and the air district is to be notified 10 days in advance of any proposed demolition or abatement work. Any asbestos-containing material disturbance at the project site would be subject to the requirements of air district Regulation 11, Rule 2: Hazardous Materials—Asbestos Demolition, Renovation, and Manufacturing. The local office of the occupational safety and health administration must also be notified of asbestos abatement to be carried out. Asbestos abatement contractors must follow state regulations contained in Title 8 of California Code of Regulations section 1529 and sections 341.6 through 341.14, where there is asbestos-related work involving 100 gross square feet or more of asbestos-containing material. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services. The contractor and hauler of the material are required to file a Hazardous Waste Manifest that details the hauling of the material from the site and the disposal of it. Pursuant to California law, the building department would not issue the required permit until the applicant has complied with the requirements described above. These regulations and procedures already established as part of the building permit review process would ensure that any potential impacts due to asbestos would be reduced to a less-than-significant level.

CONCLUSION

The proposed project would be required to remediate potential soil contamination described above in accordance with article 22A. Remediation would typically be achieved through one of several methods that include off haul and disposal of contaminated soils, on-site treatment of soil or groundwater, or a vapor barrier installation. The health department would oversee this process, and compliance with health code article 22A and the related regulations identified above would ensure that project activities that disturb or release of hazardous substances that may be present at the project site would not expose people in the project vicinity to unacceptable risk levels.

Based on mandatory compliance with existing regulatory requirements and the Maher Ordinance, the proposed project would not result in a significant hazard to the public or environment from contaminated soil and/or groundwater, asbestos, or lead-based paint, and the proposed project would result in a ***less-than-significant*** impact with respect to these hazards, and no mitigation measures are necessary.

Impact HZ-3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. ***(Less than Significant)***

The project site is within 0.25 mile of Alta Vista Lower School located at 450 Somerset Street, Phillip and Sala Burton Academic High School located at 400 Mansell Street, ER Taylor Elementary School located at 423 Burrows Street, and Dr. Martin Luther King Jr. Academic Middle School located at 350 Girard Street. The proposed project would not store, handle, or dispose of significant quantities of hazardous materials or otherwise include any uses that would result in the emission of hazardous substances. Any hazardous materials currently on the site, such as asbestos, lead-based paint, and contaminated soils would be removed before or during demolition of the existing buildings and prior to construction. The materials would be handled in compliance with applicable laws and regulations, as described under Impact HZ-2 above. With adherence to these regulations, there would be no potential for such materials to affect the nearest school.

Therefore, the proposed project would have a ***less-than-significant*** impact related to hazardous emissions or materials within 0.25 mile of a school. No mitigation measures are necessary.

Impact HZ-4: The proposed project would not impair implementation of an adopted emergency response plan or emergency evacuation plan. ***(Less than Significant)***

The city's Emergency Management Program is part of a jurisdiction-wide system that provides emergency management guidance related to prevention, preparedness, response, and recovery. The city's Emergency Response Plan uses an all-hazards approach to emergency planning and, therefore, encompasses all hazards that are applicable to the city and county, both natural and manmade, ranging from planned events to large-scale disasters.[129]

San Francisco ensures fire safety primarily through provisions of the building and fire codes. Final building plans would be reviewed and approved by the San Francisco Fire Department and Department of Building Inspection, to ensure conformance with these provisions. In this way, potential fire hazards, including those associated with hydrant water pressures and emergency access, would be mitigated during the permit review process. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan or expose people or structures to a significant risk of loss, injury, or death involving fires.

Implementation of the proposed project could add incrementally to transportation conditions in the immediate area in the event of an emergency evacuation. As discussed in Section E.5, Transportation and Circulation, the proposed project's contribution to traffic conditions would not be substantial within the context of the urban setting of the project site, and it is expected that project-related traffic would be dispersed within the existing street grid, such that there would be no significant adverse impacts on transportation conditions. Therefore, the proposed project would not impair implementation of an adopted emergency response plan or emergency evacuation plan. This impact would be ***less than significant***, and no mitigation measures are necessary.

Impact C-HZ-1: The proposed project, in combination with cumulative projects, would not result in significant cumulative impacts related to hazards and hazardous materials. ***(Less than Significant)***

Hazards and hazardous materials related impacts are generally site-specific and typically do not combine with impacts from other planned and foreseeable projects to result in significant cumulative impacts. New developments in the vicinity of the project site would be subject to similar regulatory requirements and mitigation measures as the proposed project. Therefore, large, unexpected releases of hazardous materials of the type that would contribute to significant cumulative impacts are not expected. Compliance with existing regulations pertaining to the treatment and management of hazardous materials would ensure that the proposed project would not combine with cumulative projects in the vicinity to result in a significant cumulative impact. Therefore, cumulative hazards impacts would be ***less than significant***, and no mitigation measures would be required.

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[129] City and County of San Francisco, *Emergency Response Plan*, December 2010.

18. Mineral Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
18. MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☐
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?	☐	☐	☐	☒	☐

Impact MI-1: The proposed project would have no impact on mineral resources. *(No Impact)*

All land in San Francisco, including the project site, is designated Mineral Resource Zone 4 (MRZ4) by the California Division of Mines and Geology under the Surface Mining and Reclamation Act of 1975.[130] This designation indicates that there is inadequate information available for assignment to any other mineral resource zone, and thus, the project site is not a designated area of significant mineral deposits. Furthermore, according to the general plan, no significant mineral resources exist in San Francisco. No operational mineral resource recovery sites exist in the project area. Therefore, the proposed project would not result in the loss of availability of a locally or regionally important mineral resource and would have **no impact** on mineral resources. No mitigation measures are required.

Impact C-MI-1: The proposed project, in combination with cumulative projects, would not result in a significant cumulative impact related to mineral resources. *(No Impact)*

As described above, the entire city is designated MRZ- 4, which indicates that no known significant mineral resources exist at the project site or within the project vicinity. Because the project would result in no impact to mineral resources, the proposed project would not have the potential to contribute to cumulative impacts related to mineral resources. No mitigation measures are required.

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[130] California Division of Mines and Geology, *Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Zone, Open File Report 96-03*, 1996.

19. Energy

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
19. ENERGY. Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	☐

Impact EN-1: The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. ***(Less than Significant)***

The proposed project would increase the population and intensity of use on the project site but would not exceed anticipated growth in the area. The proposed project would be subject to the energy conservation standards included in the San Francisco Green Building Ordinance. Documentation showing compliance with the ordinance would be required to be submitted with the building permit applications, and compliance would be enforced by the building department. In addition, as described in Section E.8, Greenhouse Gas Emissions, compliance with the applicable provisions of the city's GHG Reduction Strategy demonstrates that the proposed project would not result in wasteful or inefficient consumption of energy resources. The project would also conserve fuel and energy use because it would include the addition of 62 dwelling units in an urban area that is accessible by transit and is bicycle and pedestrian friendly. Therefore, the proposed project would not cause a wasteful use of energy, and impacts related to use of fuel, water, and energy. The impact would be ***less than significant***, and no mitigation would be required.

Impact C-EN-1: The proposed project, in combination with cumulative projects, would increase the use of energy, fuel and water resources, but not in a wasteful manner. ***(Less than Significant)***

While overall energy demand in California is increasing with increases in population, the state is also making concerted energy conservation efforts. While the city produces a substantial demand for energy and fuel, both city and state policies seek to minimize increases in demand through conservation and energy efficiency regulations and policies such that energy is not used in a wasteful manner, and the cumulative impacts with respect to energy and fuel use. Because San Francisco is substantially built out, development in the city's urban core focuses on densification, which effectively reduces per capita use of energy and fuel by concentrating utilities and services in locations where they can be used efficiently. Similarly, the City recognizes the need for water conservation and has instituted programs and policies to maximize water conservation. San Francisco has one of the lowest per capita water use rates in the state[131] and routinely implements water conservation measures through code requirements and policy. Nearby cumulative

[131] San Francisco Public Utilities Commission, Water Resources Division Annual Report, Fiscal Year 2018–19, https://sfwater.org/Modules/ShowDocument.aspx?documentid=14560, accessed March 15, 2021.

development projects would be subject to the same energy and water conservation ordinances applicable to the proposed project. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less-than-significant*** cumulative impact related to energy, fuel, and water resources.

20. Agriculture and Forest Resources

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
20. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☒
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))?	☐	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☐	☒
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 forest land to non-forest use?	☐	☐	☐	☐	☒

The project site is located within an urbanized area of San Francisco. No land in San Francisco has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. The project site was used for agricultural uses (flower nursery) until the early 1990s;

however, the site has not been used since. The project site is zoned for residential uses and would not require the conversion of any land designated as prime farmland, unique farmland, or Farmland of Statewide Importance to nonagricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts, as no lands in San Francisco are zoned agricultural or are under Williamson Act contracts. No land in San Francisco is designated as forest land or timberland production by CEQA or government code. Therefore, the proposed project would not conflict with zoning for forest land, cause a loss of forest land, or convert forest land to a different use. Therefore, none of the agriculture and forest resources significance criteria is applicable to the proposed project, and these topics are not discussed further.

21. Wildfire

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
21. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plans?	☐	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☐	☒
d) Expose people or structures to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.[132] Therefore, none of the wildfire significance criteria are applicable to the proposed project, and these topics are not discussed further.

[132] California Department of Forestry and Fire Protection, San Francisco County Draft Fire Hazard Severity Zones in Local Responsibility Areas Map, October 5, 2007, http://frap.fire.ca.gov/webdata/maps/san_francisco/fhszl06_1_map.38.pdf.

22. Mandatory Findings of Significance

Topic	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Not Applicable
22. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:					
a) Have the potential to substantially 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, substantially 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?	☒	☐	☐	☐	☐
b) 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.)	☒	☐	☐	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	☐

As discussed in the various topics in this initial study, the proposed project is anticipated to have less-than-significant impacts on most of the environmental topics discussed. Where necessary, mitigation measures have been identified to reduce impacts to less-than-significant levels. Mitigation measures are included for the following topics: archeological resources, tribal cultural resources, noise, air quality, biological resources, and paleontological resources. However, the proposed project could have potentially significant impacts related to historic architectural resources; therefore, this topic is further discussed and analyzed in the EIR.

The proposed project, in combination with foreseeable projects, as described in Section E, would not result in significant cumulative impacts on land use, population and housing, tribal cultural resources, transportation and circulation, noise, air quality, GHG emissions, wind, shadow, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral resources, energy resources, agricultural and forest resources, and wildfire with implementation of identified mitigation. However, the proposed project, in combination with foreseeable projects, would not result in cumulative impacts related to historic architectural resources.

Potential adverse effects on human beings have been considered as a part of the analysis of individual environmental topics in this initial study. As discussed above, the proposed project has the potential to result in significant impacts with respect to historic architectural resources, which could adversely affect human beings. The EIR assesses this topic and identifies mitigation measures where applicable.

F. Mitigation Measures

Mitigation Measure M-CR-2: Archeological Testing. Based on a reasonable presumption that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant having expertise in California prehistoric and urban historical archeology. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines section 15064.5(a)(c).

Archeological Testing Program. The archeological testing program shall be conducted in accordance with the approved Archeological Testing Plan (ATP). The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

The archeological consultant and the ERO shall consult on the scope of the ATP reasonably prior to any project-related soils disturbing activities commencing. The archeological consultant shall prepare and submit to the ERO for review and approval an ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, lay out what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ATP shall also identify the testing method to be used, and the locations recommended for testing and shall identify archeological monitoring requirements for construction soil disturbance as warranted. The archeologist shall implement the approved testing as specified in the approved ATP prior to and/or during construction. The archeologist shall consult with the ERO at the conclusion of testing to report testing results, determine whether data recovery is needed, and provide construction monitoring recommendations and shall implement monitoring as determined in consultation with the ERO.

Archeological Data Recovery Plan. If testing results are positive and the ERO determines that an archeological data recovery program is warranted, the archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO

shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Consultation with Descendant Communities. On discovery of an archeological site associated with descendant Native Americans, the Overseas Chinese, or other potentially interested descendant group an appropriate representative of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to offer recommendations to the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archeological Resources Report (FARR) shall be provided to the representative of the descendant group.

Human Remains and Funerary Objects. The treatment of human remains and funerary objects discovered during any soils disturbing activity shall comply with applicable State and federal laws. This shall include immediate notification of the Medical Examiner of the City and County of San Francisco and, in the event of the Medical Examiner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission, which will appoint a Most Likely Descendant (MLD). The MLD will complete his or her inspection of the remains and make recommendations or preferences for treatment within 48 hours of being granted access to the site (Public Resources Code section 5097.98). The ERO also shall be notified immediately upon the discovery of human remains.

The project sponsor and ERO shall make all reasonable efforts to develop a Burial Agreement ("Agreement") with the MLD, as expeditiously as possible, for the treatment and disposition, with appropriate dignity, of human

remains and associated or unassociated funerary objects (as detailed in CEQA Guidelines section 15064.5(d)). The Agreement shall take into consideration the appropriate excavation, removal, recordation, scientific analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If the MLD agrees to scientific analyses of the remains and/or associated or unassociated funerary objects, the archeological consultant shall retain possession of the remains and associated or unassociated funerary objects until completion of any such analyses, after which the remains and associated or unassociated funerary objects shall be reinterred or curated as specified in the Agreement.

Nothing in existing State regulations or in this mitigation measure compels the project sponsor and the ERO to accept treatment recommendations of the MLD. However, if the ERO, project sponsor, and MLD are unable to reach an Agreement on scientific treatment of the remains and associated or unassociated funerary objects, the ERO, with cooperation of the project sponsor, shall ensure that the remains and associated or unassociated funerary objects are stored securely and respectfully until they can be reinterred on the property, with appropriate dignity, in a location not subject to further or future subsurface disturbance.

Treatment of historic-period human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity, additionally, shall follow protocols laid out in the project's archeological treatment documents, and in any related agreement established between the project sponsor, Medical Examiner, and the ERO.

Archeological Public Interpretation Plan. The project archeological consultant shall submit an Archeological Public Interpretation Plan (APIP) if a significant archeological resource is discovered during a project. If the resource to be interpreted is a tribal cultural resource, the APIP shall be prepared in consultation with and developed with the participation of Ohlone tribal representatives. The APIP shall describe the interpretive product(s), locations or distribution of interpretive materials or displays, the proposed content and materials, the producers or artists of the displays or installation, and a long-term maintenance program. The APIP shall be sent to the ERO for review and approval. The APIP shall be implemented prior to occupancy of the project.

Final Archeological Resources Report. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO. The archeological consultant shall submit a draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological, historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken, and if applicable, discusses curation arrangements. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound and one unlocked, searchable PDF copy on digital medium of the approved FARR along with GIS shapefiles of the site and feature locations and copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Curation. Significant archeological collections shall be permanently curated at an established curatorial facility selected in consultation with the ERO.

Mitigation Measure M-TCR-1: Tribal Cultural Resources Archeological Resource Preservation Plan and/or Interpretive Program.

Preservation in Place. In the event of the discovery of an archeological resource of Native American origin, the Environmental Review Officer (ERO), the project sponsor, and the tribal representative, shall consult to determine whether preservation in place would be feasible and effective. If it is determined that preservation-in-place of the tribal cultural resource (TCR) would be both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP), which shall be implemented by the project sponsor during construction. The consultant shall submit a draft ARPP to Planning for review and approval.

Interpretive Program. If the Environmental Review Officer (ERO), in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. A Tribal Cultural Resources Interpretation Plan (TCRIP) produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifacts displays and interpretation, and educational panels or other informational displays.

Mitigation Measure M-NO-3: Fixed Mechanical Equipment Noise Control for Building Operations. Prior to approval of a building permit, the project sponsor shall submit documentation to the Environmental Review Officer (ERO) or the officer's designee, demonstrating with reasonable certainty that the building's fixed mechanical equipment (such as heating, ventilation and air conditioning [HVAC] equipment) meets the noise limits specified in section 2909 of the noise ordinance (i.e., a 5 dB increase above the ambient noise level at the property plane for residential properties; and interior noise limits of 55 dBA and 45 dBA for daytime and nighttime hours inside any sleeping or living room in a nearby dwelling unit on a residential property assuming windows open, respectively). Acoustical treatments required to meet the noise ordinance may include, but are not limited to:

- Enclosing noise-generating mechanical equipment;
- Installing relatively quiet models of air handlers, condenser units, exhaust fans, and other mechanical equipment;
- Using mufflers or silencers on equipment exhaust fans;
- Orienting or shielding equipment to protect noise sensitive receptors (residences, hospitals, convalescent homes, schools, churches, hotels and motels, and sensitive wildlife habitat) to the greatest extent feasible;
- Increasing the distance between noise-generating equipment and noise-sensitive receptors; and/or
- Placing barriers around the equipment to facilitate the attenuation of noise.

Mitigation Measure M-AQ-3: Construction Air Quality. The project sponsor or the project sponsor's contractor shall comply with the following:

A. *Engine Requirements*.

1. All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (CARB) Tier 4 Interim or Tier 4 Final off-road emission standards.
2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas and at the construction site to remind operators of the two-minute idling limit.
4. The contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment, and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.

B. *Waivers*.

1. The Environmental Review Officer (ERO) or designee may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).
2. The ERO may waive the equipment requirements of Subsection (A)(1) if: a particular piece of Tier 4 interim or Tier 4 final off-road equipment is technically not feasible; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or, there is a compelling emergency need to use off-road equipment that is not Tier 4 compliant. If the ERO grants the waiver, the contractor must use the next cleanest piece of off-road equipment, according to table below. Emerging technologies with verifiable emissions reductions supported by substantial evidence may also be employed in lieu of the step-down schedule below.

Table M-AQ-3-1 Off-Road Equipment Compliance Step-down Schedule

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	ARB Level 3 VDECS*
2	Tier 2	ARB Level 2 VDECS
3	Tier 2	ARB Level 1 VDECS

How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor would need to meet Compliance Alternative 1. If the ERO determines that the Contractor cannot supply off-road equipment meeting Compliance Alternative 1, then the Contractor must meet Compliance Alternative 2. If the ERO determines that the Contractor cannot supply off-road equipment meeting Compliance Alternative 2, then the Contractor must meet Compliance Alternative 3.

* ARB = air resources board
VDECS = verified diesel emissions control strategy

C. *Construction Emissions Minimization Plan.*

Before starting on-site construction activities, the contractor shall submit a Construction Emissions Minimization Plan (Plan) to the ERO for review and approval. The Plan shall state, in reasonable detail, how the contractor will meet the requirements of section A.

1. The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel use and hours of operation. For VDECS installed, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
2. The project sponsor shall ensure that all applicable requirements of the Plan have been incorporated into the contractor's contract specifications. The Plan shall include a certification statement that the contractor agrees to comply fully with the Plan.
3. The contractor shall make the Plan available to the public for review on-site during working hours. The contractor shall post at the construction site a legible and visible sign summarizing the Plan. The sign shall also state that the public may ask to inspect the Plan for the project at any time during working hours and shall explain how to request to inspect the Plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

D. *Monitoring.*

After start of construction activities, the contractor shall submit quarterly reports to the ERO documenting compliance with the Plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the Plan.

Mitigation Measure M-BI-1a: Conduct Pre-construction Surveys for Nesting Migratory Birds and Buffer Areas. Nesting birds and their nests shall be protected during construction by implementation of the following measures for each construction phase:

a. To the extent feasible, the project sponsor shall conduct initial activities including, but not limited to, vegetation removal, tree trimming or removal, ground disturbance, building demolition, site grading, and other construction activities that may compromise breeding birds or the success of their nests outside of the nesting season (January 15 through August 15).

b. If construction during the bird nesting season cannot be fully avoided, a qualified wildlife biologist shall conduct pre-construction nesting surveys within 14 days prior to the start of construction or demolition at areas that have not been previously disturbed by project activities or after any construction breaks of 14 days or more. Typical experience requirements for a "qualified biologist" include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities and a minimum of two years of experience in biological monitoring or surveying for nesting birds. Surveys shall be performed in publicly accessible areas within 100 feet of common bird species and within 250 feet of the project site in order to locate any active raptor (birds of prey) nests.

c. If active nests are located during the preconstruction nesting bird surveys, a qualified biologist shall evaluate if the schedule of construction activities could affect the active nests; if so, the following measures shall apply, as determined by the biologist:

    i. If construction is not likely to affect the active nest, construction may proceed without restriction; however, a qualified biologist shall regularly monitor the nest at a frequency determined appropriate for the surrounding construction activity to confirm there is no adverse effect. Spot-check monitoring frequency would be determined on a nest-by-nest basis considering the particular construction activity, duration, proximity to the nest, and physical barriers which may screen activity from the nest. The qualified biologist may revise their determination at any time during the nesting season in coordination with the planning department.

    ii. If it is determined that construction may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all project work shall halt within the buffer until a qualified biologist determines the nest is no longer in use. These buffer distances shall be equivalent to survey distances (100 feet for passerines and 250 feet for raptors); however, the buffers may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction.

    iii. Modifying nest buffer distances, allowing certain construction activities within the buffer, and/or modifying construction methods in proximity to active nests shall be done at the discretion of the qualified biologist and in coordination with the planning department, who would notify California Department of Fish and Wildlife (CDFW). Necessary actions to remove or relocate an active nest(s) shall be coordinated with the planning department and approved by CDFW.

    iv. Any work that must occur within established no-disturbance buffers around active nests shall be monitored by a qualified biologist. If adverse effects in response to project work within the buffer are observed and could compromise the nest, work within the no-disturbance buffer(s) shall halt until the nest occupants have fledged.

    v. Any birds that begin nesting within the project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels, so

exclusion zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist in coordination with the planning department, who would notify CDFW. Work may proceed around these active nests as long as the nests and their occupants are not directly affected.

d. In the event inactive nests are observed within or adjacent to the project site at any time throughout the year, any removal or relocation of the inactive nests shall be at the discretion of the qualified biologist in coordination with the planning department, who would notify and seek approval from the CDFW, as appropriate. Work may proceed around these inactive nests.

Mitigation Measure M-BI-1b: Avoidance and Minimization Measures for Bats. A qualified biologist who is experienced with bat surveying techniques shall conduct a pre-construction habitat assessment of the project site to characterize potential bat habitat and identify potentially active roost sites. Typical experience requirements for a "qualified biologist" include a minimum of four years of academic training and professional experience in biological sciences and related resource management activities, and a minimum of two years of experience monitoring or surveying for bats. No further action is required should the pre-construction habitat assessment not identify bat habitat or signs of potentially active bat roosts within the project site (e.g., guano, urine staining, dead bats, etc.).

The following measures shall be implemented should potential roosting habitat or potentially active bat roosts be identified during the habitat assessment in trees to be removed or buildings to be demolished under the proposed project:

1. Building demolition shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These dates avoid the bat maternity roosting season and period of winter *torpor*.[133]
2. Depending on temporal guidance as defined below, the qualified biologist shall conduct pre-construction surveys of potential bat roost sites identified during the initial habitat assessment no more than 14 days prior to tree trimming/removal or building demolition.
3. If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites until the qualified biologist determines they are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site.
4. If special-status bat species or maternity or hibernation roosts are detected during these surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist in coordination with the California Department of Fish and Wildlife. Such measures may include postponing the removal of buildings, establishing exclusionary work buffers while the roost is active (e.g., 100-foot no-disturbance buffer), or other avoidance measures.
5. The qualified biologist shall be present during building demolition if potential bat roosting habitat or active bat roosts are present. Buildings with active roosts shall be disturbed only under clear weather

[133] *Torpor* refers to a state of decreased physiological activity with reduced body temperature and metabolic rate.

conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit.

6. The demolition of buildings containing or suspected to contain bat roosting habitat or active bat roosts shall be done under the supervision of the qualified biologist. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.

Mitigation Measure GE-5a: Worker Environmental Awareness Training During Ground Disturbing Construction Activities. Prior to commencing construction, and ongoing throughout ground disturbing activities (e.g., excavation, utility installation, the project sponsor or their designee (herein referred as project sponsor) shall ensure that all project construction workers are trained on the contents of the Paleontological Resources Alert Sheet (Draft for Review provided), as provided by the Environmental Review Officer (ERO). The Paleontological Resources Alert Sheet shall be prominently displayed at the construction site, during ground disturbing activities, to provide pre-construction worker environmental awareness training regarding potential paleontological resources.

In addition, the project sponsor shall inform construction personnel of the immediate stop work procedures and other procedures to be followed if bones or other potential fossils are unearthed at the project site. As new workers that will be involved in ground disturbing activities arrive at the project site, the construction supervisor shall train them.

The project sponsor shall submit in writing (email, letter, memo) confirming the timing of the worker training) to the ERO. The letter shall confirm the project's location, the date of training, the location of the informational handout display, and the number of participants. The letter shall be transmitted to the ERO within five (5) business days of conducting the training.

Mitigation Measure M-GE-5b: Discovery of Unanticipated Paleontological Resources during Ground Disturbing Construction Activities. In the event of the discovery of an unanticipated paleontological resource during construction, the project sponsor or their designee (herein referred as project sponsor) shall ensure ground disturbing activities shall temporarily be halted within 20 feet of the find until the discovery is examined by a qualified paleontologist as recommended by the Society of Vertebrate Paleontology standards (SVP 2010) and Best Practices in Mitigation Paleontology (Murphey et al. 2019). Work within the sensitive area shall resume only when deemed appropriate by the qualified paleontologist in consultation with the Environmental Review Officer (ERO).

The qualified paleontologist shall determine: (1) if the discovery is scientifically significant; (2) the necessity for involving other responsible or resource agencies and stakeholders, if required or determined applicable; and (3) methods for resource recovery. If a paleontological resource assessment results in a determination that the resource is not scientifically important, this conclusion shall be documented in a Paleontological Evaluation Letter to demonstrate compliance with applicable statutory requirements (e.g., Federal Antiquities Act of 1906, CEQA Guidelines section 15064.5, California Public Resources Code chapter 17,

section 5097.5, Paleontological Resources Preservation Act 2009). The Paleontological Evaluation Letter shall be submitted to the ERO for review within 30 days of the discovery.

If the qualified paleontologist determines that a paleontological resource is of scientific importance, and there are no feasible measures to avoid disturbing this paleontological resource, the qualified paleontologist shall prepare a Paleontological Impact Reduction Program (impact reduction program). The impact reduction program shall include measures to fully document and recover the resource of scientific importance. The qualified paleontologist shall submit the impact reduction program to the ERO for review and approval. The impact reduction program shall be submitted to the ERO for review within 10 business days of the discovery. Upon approval by the ERO, ground disturbing activities in the project area shall resume and be monitored as determined by the qualified paleontologist for the duration of such activities.

The impact reduction program shall include: (1) procedures for construction monitoring at the project site; (2) fossil preparation and identification procedures; (3) curation of paleontological resources of scientific importance into an appropriate repository; and (4) preparation of a Paleontological Resources Report (report or paleontology report) at the conclusion of ground disturbing activities. The report shall include dates of field work, results of monitoring, fossil identifications to the lowest possible taxonomic level, analysis of the fossil collection, a discussion of the scientific significance of the fossil collection, conclusions, locality forms, an itemized list of specimens, and a repository receipt from the curation facility. The project sponsor shall be responsible for the preparation and implementation of the impact reduction program, in addition to any costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The paleontology report shall be submitted to the ERO for review within 30 business days from conclusion of ground disturbing activities, or as negotiated following consultation with the ERO.

G. Public Notice and Comment

Publication of the Notice of Preparation (NOP) initiated a 30-day public review and comment period that began on August 26, 2020, and ended on September 25, 2020. During the NOP review and comment period, a total of nine comments were submitted to the planning department. The topics raised in the comment letters are addressed in this initial study and this EIR to which this initial study is attached, as appropriate (refer to EIR Chapter 1, Introduction, for additional detail on the public noticing and comments). The planning department considered the comments made by the public in preparation of the initial study and EIR for the proposed project. The NOP and comment letters are included as EIR Appendix A.

H. Determination

On the basis of this Initial Study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.

☒ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Devyani Jain

Lisa Gibson
Environmental Review Officer
for
Rich Hillis
Director of Planning

DATE June 23, 2021

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