Middlefield Park Master Plan

Draft Supplemental Environmental Impact Report

SCH No.: 2021100026

Prepared by

City of Mountain View

In Consultation with

50 YEARS EST. 1972 DAVID J. POWERS & ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS & PLANNERS

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SECTION 1.0 SUMMARY

The City of Mountain View, as the Lead Agency, has prepared this Draft Supplemental Environmental Impact Report (EIR) for the Middlefield Park Master Plan project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As the CEQA Lead Agency for this project, the City of Mountain View is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts (including growth-inducing impacts and cumulative impacts), mitigation measures, and alternatives. It is not the intent of an EIR to recommend either approval or denial of a project.

This EIR tiers from the certified 2020 East Whisman Precise Plan Integrated Final EIR (Precise Plan EIR, State Clearinghouse [SCH] #2017082051) and 2012 Mountain View 2030 General Plan and Greenhouse Gas Reduction Program EIR (SCH# 2011012069), all of which are specifically incorporated by reference into this EIR.

Summary of the Project

The approximately 40-acre project site is located to the northeast of the Ellis Street and East Middlefield Road intersection, within the Mixed-Use and Employment Character Areas of the East Whisman Precise Plan (Precise Plan) and adjacent to the Valley Transportation Authority's (VTA) Middlefield Light Rail Station. The project site is currently developed with 23 office and light industrial buildings totaling approximately 684,645 square feet, as well as landscaping and surface parking lots. The project proposes to demolish the existing improvements and construct 1,317,000 square feet of office uses, up to 1,900 residential units, up to 30,000 square feet of ground floor retail space, and up to 20,000 square feet of community/civic uses.[1] The project would also dedicate approximately 7.28 acres for three new public parks and construct a 2.87-acre privately owned publicly accessible (POPA) park. The project would also include new vehicular, bicycle, and pedestrian circulation. As a project option, the applicant could develop a private district utilities system with underground utility lines to serve some buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. A more detailed project description is provided in Section 3.2 Project Description.

[1] The Master Plan project materials also collectively refer to the 30,000 square feet of ground floor retail space and 20,000 square feet of community/civic space as "Active Use" space.

Summary of Significant Impacts and Mitigation Measures

This section summarizes (1) new significant impacts and mitigation measures identified for the project, which were not previously disclosed in the Precise Plan EIR (identified as MM), and (2) impacts and mitigation measures previously disclosed in the Precise Plan EIR that are applicable to the project (identified as Precise Plan EIR MM). The impacts and mitigation measures refer to the Project (which assumes standard municipal utilities), the Project with District Utilities System Option (which assumes a private district utility system would be constructed as a project design option), or Both Options.

A detailed discussion of impacts and mitigation measures is provided in Sections 4.0 New Significant Environmental Effects and 5.0 Previously Identified Effects of this EIR.

Significant Impact	Mitigation Measures
Impact AQ-1: Both Project Options: The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])** **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])** **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**	**Precise Plan EIR MM AQ-3.1: Both Project Options:** Construction criteria pollutant and TAC quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through the following measures: • Construction equipment selection for low emissions; • Use of alternative fuels, engine retrofits, and added exhaust devices; • Low Volatile Organic Compounds (VOC) paints; • Modification of construction schedule; and • Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust. **MM AQ-1.1: Both Project Options:** Pursuant to Precise Plan EIR MM AQ-3.1, the project (under either option) shall implement the following measures during all phases of construction: • All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NO_x and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise: o If use of Tier 4 Final equipment is not commercially available, the project applicant shall use alternative equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control

Significant Impact	Mitigation Measures
	equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85-percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination). The project applicant shall provide to the City for review and approval documentation showing that engines that comply with Tier 4 Final off-road emission standards are not commercially available for the specific off-road equipment necessary during construction. For purposes of this mitigation measure, "commercially available" shall take into consideration the following factors: (i) potential significant delays to critical-path timing of construction and (ii) the geographic proximity to the project site of Tier 4 Final equipment. o Use of alternatively fueled equipment with lower NO_x emissions compared to traditional diesel fuel equipment that meets or exceeds the NO_x and PM reduction requirements of U.S. EPA Tier 4 Final engine emission standards, as required above. • Use electric equipment such as aerial lifts, air compressors, cement mortar mixers, concrete/industrial saws, cranes, and welders. Portable equipment shall be powered by grid electricity or alternative fuels (i.e., not diesel) instead of by diesel generators. • Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than two minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit. • Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment. Use low VOC coatings to reduce ROG emissions during construction. The project shall use low VOC coatings that are below current BAAQMD requirements (i.e., Regulation

Significant Impact	Mitigation Measures
	8, Rule 3: Architectural Coatings), for at least 80 percent of all residential and nonresidential interior paint and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 80 percent of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low VOC coatings to be used. Examples of "super-compliance" coatings are contained in the South Coast Air Quality Management District's website. **MM AQ-1.2: Both Project Options:** All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.
Impact AQ-4: Project with District Utilities Systems Option: The project with District Utilities Systems Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(New Impact [Less than Significant, Impact with Mitigation Incorporated])**	**MM AQ-4.1: Project with District Utilities System Option:** The project applicant shall develop an odor control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor control plan shall describe the design elements and best management practices built into the facility, including the following: • Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility; • Odor proofing of refuse containers used to store and transport grit and screenings or biosolids; and • Injection of chemicals to control hydrogen sulfide. The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues, as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint and corrective actions could include installing specific odor control technologies (e.g., odor control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's Designee) and BAAQMD prior to issuance of

Significant Impact	Mitigation Measures
	building permits for the CUP. In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to less than five per year, the plant shall cease operations. All wastewater generated by the project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility. **MM AQ-4.2: Project with District Utilities System Option:** Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.
Impact HAZ-2: Both Project Options: The project (under either option) 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. (Same Impact as Approved Project. **[Less than Significant Impact with Mitigation])**	**Precise Plan EIR MM HAZ-3.1:** Prior to the start of any redevelopment activity, a property-specific Phase I ESA shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents. At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soils, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the project-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall

Significant Impact	Mitigation Measures
	be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., EPA, RWQCB and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.
Impact NOI-2: Both Project Options: The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**	**Precise Plan EIR MM NOI-4.1:** Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where project construction is anticipated to include vibration-generating activities such as pile driving or use of vibratory rollers, in close proximity to existing structures, site specific vibration studies should be concluded to determine the area of impact and to identify appropriate mitigation measures which may include the following: • Identification of sites that would include vibration compaction activities such as pile driving and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-born vibration. Vibration levels should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task. • Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. • Construction contingencies would be identified for when vibration levels approached the limits. • At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may

Significant Impact	Mitigation Measures
	indicate the need for more or less intensive measurements. • When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures. • Conduct post-survey on structures when either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.
Impact UTL-1: Both Project Options: The project 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, the construction or relocation of which could cause significant environmental effects. **(Same Impact as Approved Project [Less than Significant Impact])**	**Precise Plan EIR MM UTL-1.1:** The City shall require, determined on a project-by-project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.

Summary of Project Alternatives

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives which "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The purpose of the alternatives analysis is to determine whether there are alternatives of design, scope, or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive (CEQA Guidelines Section 15126.6).

While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The project objectives are identified in Section 3.4 Project Objectives of this EIR. The alternatives are also evaluated for their consistency with the 10 Precise Plan Guiding Principles, which are listed in Section 9.1.4. A summary of the project alternative evaluated in this EIR is provided below. Refer to Section 9.0 Alternatives for the full discussion of each alternative.

No Project, No New Development Alternative

The CEQA Guidelines specifically require consideration of a "No Project" Alternative. The purpose of including a No Project Alternative is to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The CEQA Guidelines specifically advise that the No Project Alternative shall address both the existing conditions and "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (Section 15126.6(e)(2).

Under the No Project, No New Development Alternative, the project site would remain as it is today, developed with a total of 684,645 square feet of office, R&D and light industrial uses. The No Project, No New Development Alternative would avoid the project's impacts (under either option) but would not meet any of the project objectives. This alternative would not meet any of the Precise Plan's guiding principles because it does not redevelop the site consistent with the Precise Plan.

No Project, Redevelopment Alternative

Given the site's land use designation, it is reasonable to assume that if the proposed project were not approved, an office development could be developed on the project site at the base FAR allowed with a minimum amount of retail. The No Project Redevelopment Alternative would include up to 696,285 square feet (0.4 FAR) of non-residential uses, including a minimum 5,000 square feet of retail required by the Precise Plan. The No Project Redevelopment Alternative would result in less or similar impacts as the proposed project, since it is less overall development and does not include residential development. In regards to the project objectives, the No Project Redevelopment Alternative would:

- Meet objectives e and g;
- Partially meet objectives a, b, c, and f; and
- Not meet objectives h and i.

In regards to the Precise Plan guiding principles, this alternative would:

- Aligns with principle 8, 9, and 10;
- Partially aligns with principles 3; and
- Not align with principles 1,2,6, and 7.
- Guiding principles 4 and 5 are not applicable based on the project location.

Mitigated 19% Reduced Development Alternative

The purpose of the Mitigated 19% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts with the incorporation of the air quality mitigation measures identified for the project (under either option). The Mitigated 19% Reduced Development Alternative assumes approximately 1,066,770 square feet of office uses, 1,539 residential units, 24,300 square feet of retail uses, 16,200 square feet of community/civic uses, and 7.8 acres of park land. The Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions (with mitigation) and lessen the project's mitigable construction criteria pollutant emissions and health impacts with implementation of the same mitigation measures identified for the project (under either option). All other impacts for this alternative would be the same or similar as the proposed project. In regards to the project objectives,

the Mitigated 19% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i; and
- Partially meet objective b and c.

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 8, 9, and 10 but alignment with 7 significantly reduces residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

31% Reduced Development Alternative

The purpose of the 31% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts without requiring mitigation. The 31% Reduced Development Alternative assumes approximately 908,730 square feet of office uses, 1,311 residential units, 20,700 square feet of ground floor retail space, 13,800 square feet of community/civic uses, and 6.6 acres of park land. The 31% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions (no mitigation required) and lessen the project's mitigable construction criteria pollutant emissions and significant, unavoidable construction health risk impacts with incorporation of the same mitigation measures as identified for the project (under either option). All other impacts would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 31% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i
- Partially meet objectives b and c

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 7, 8, and 10, but alignment with principle 7 significantly reduces residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

Rescheduled Construction Alternative

The purpose of this alternative is to avoid the project's significant, unavoidable construction health risk impact. The project would result in significant, unavoidable construction health risk impacts due to the location of Phase II construction activities (under either option) adjacent to the approved 400 Logue Avenue residential project's future sensitive receptors. Rescheduling Phase II construction activities to occur before the approved 400 Logue Residential project is occupied would ensure health risk impacts to these residents from the project (under either option) are reduced. The Rescheduled Construction Alternative would avoid the project's significant, unavoidable health risk impacts. All other impacts would be the same as the proposed project. The alternative would result in a period of vacant office buildings while residential units are constructed based on the Precise Plan, which requires new office uses built under the Jobs-Housing Linkage program to obtain occupancy only once the associated residential development obtains occupancy. Therefore, this alternative would meet all of the project objectives to the same extent as the proposed project, except for objective d.

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 7, 8, 9, and 10.
- Guiding principles 4 and 5 are not applicable based on the project location

Areas of Concern

Environmental concerns expressed thus far from local residents, property owners, organizations, and/or agencies about the project include the following:

- Lighting impacts
- Impacts to groundwater resulting from construction dewatering
- Sunnyvale Golf Course as a barrier to the east
- Pedestrian safety near Middlefield Light Rail Station
- Project-generated traffic on roadway and freeway capacity
- Bicycle/Pedestrian as it pertains to transportation impacts
- Required connections to existing utilities infrastructure and needed improvements

SECTION 2.0 INTRODUCTION

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The City of Mountain View, as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the Middlefield Park Master Plan project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121[a]). As the CEQA Lead Agency for this project, the City of Mountain View is required to consider the information in the EIR, along with any other available information, in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts (including growth-inducing and cumulative impacts), mitigation measures, and alternatives. It is not the intent of an EIR to recommend approval or denial of a project.

This EIR is a Supplemental EIR to the certified 2020 East Whisman Precise Plan Integrated Final EIR (Precise Plan EIR, State Clearinghouse [SCH] #2017082051). The primary purpose of the Precise Plan was to increase the density of development and incorporate a more balanced mix of land uses within the East Whisman area in proximity to existing transit facilities and jobs. The East Whisman Precise Plan (Precise Plan) allows for up to two million square feet of net new office uses[2] (and assumes conversion of approximately 2.2 million square feet of industrial and R&D space to office uses), 100,000 square feet of retail uses, 200 hotel rooms, and 5,000 multi-family residential units.

In accordance with CEQA Guidelines Section 15163(a), the lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

(1) Any of the conditions described in Section 15162 (Subsequent EIRs and Negative Declarations) would require the preparation of a subsequent EIR, and
(2) Only minor alterations or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

Based on the analysis contained in this EIR, only the discussion of the project's significant air quality impacts is needed to supplement the discussion in the Precise Plan EIR. For this reason, the City has prepared a Supplemental EIR for the project that focuses on the project's air quality impacts.

[2] The Precise Plan EIR studied up to 2,300,000 net new square feet of office; however, the City Council approved 2,000,000 net new square feet with the Precise Plan.

2.1.1 Tiering of the Environmental Review

This document is a Supplemental EIR to the Precise Plan EIR and tiers from the Precise Plan EIR and Mountain View 2030 General Plan EIR (SCH #2011012069) (General Plan EIR). The CEQA Guidelines Section 15152 contains the following information on tiering an environmental document:

(a) "Tiering" refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the EIR or negative declaration solely on the issues specific to the later project.

(b) Agencies are encouraged to tier the environmental analysis which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy or program of lesser scope, or to a site-specific EIR or negative declaration. Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration. However, the level of detail contained in a first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.

2.1.2 Focus of the Supplemental EIR

Per CEQA Guidelines Section 15163, a Supplemental EIR need only contain the necessary information to make the previously certified EIR adequate for the project, effectively focusing on additional significant effects on the environment which were not addressed in the previously certified EIR. The City of Mountain View determined that the project's effects on the following environmental resources were previously addressed and adequately covered in the Precise Plan and General Plan EIRs:

- Aesthetics
- Agriculture and Forest Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

That is, the project would not result in new or substantially more severe significant impacts to those resources listed above when compared to those disclosed in the Precise Plan EIR. However, the City of Mountain View found that the project would result in new significant effects on air quality which were not previously disclosed in the Precise Plan EIR (i.e., the previously certified EIR). A discussion of the project's new significant air quality effects is included in Section 4.0 New Significant Environmental Effects and a discussion of the project's previously disclosed environmental effects is included in Section 5.0 Previously Identified Effects of this EIR.

2.2 EIR PROCESS

2.2.1 Notice of Preparation and Scoping

In accordance with Section 15082 of the CEQA Guidelines, the City of Mountain View prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to the public and local, state, and federal agencies on October 1, 2021. The standard 30-day comment period concluded on November 1, 2021. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project. The City of Mountain View also held a public scoping meeting on October 14, 2021 to discuss the project and solicit public input as to the scope and contents of this EIR. The meeting was held virtually. One verbal public comment was provided at the meeting requesting off-road pedestrian and bicycle connectivity from the project site to the City of Sunnyvale. Appendix B of this EIR includes the NOP and the written comments received on the NOP.

2.2.2 Draft EIR Public Review and Comment Period

Publication of this Draft EIR will mark the beginning of a 45-day public review period. During this period, the Draft EIR will be available to the public and local, state, and federal agencies for review and comment. Notice of the availability and completion of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP and posted on the City's website at www.mountainview.gov/CEQA. Additionally, consistent with Assembly Bill (AB) 819, which requires all CEQA environmental documents to be submitted electronically to the Office of Planning and Research's CEQAnet database, a copy of this Draft EIR will be sent to and available on the CEQAnet Webportal. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Lindsay Hagan, Deputy Zoning Administrator
Community Development Department
500 Castro Street, PO Box 7540
Mountain View, CA 94039-7540
Lindsay.Hagan@mountainview.gov

2.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City of Mountain View will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of:

- Revisions to the Draft EIR text, as necessary;
- List of individuals and agencies commenting on the Draft EIR;
- Responses to comments received on the Draft EIR, in accordance with CEQA Guidelines (Section 15088); and
- Copies of letters received on the Draft EIR.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the lead agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

2.3.1 Notice of Determination

If the project is approved, the City of Mountain View will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office and available for public inspection for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094[g]).

SECTION 3.0 PROJECT INFORMATION

3.1 PROJECT SITE LOCATION

The Middlefield Park Master Plan (MPMP) project site is located to the northeast of the Ellis Street and East Middlefield Road intersection, within the Mixed-Use and Employment Area North Character Areas of the East Whisman Precise Plan (Precise Plan). The project site totals approximately 40 acres and consists of 14 parcels (Assessor's Parcel Numbers [APNs]: 160-58-001, 160-58-016, 160-58-017, 160-57-004, 160-57-006, 160-57-007, 160-57-008, 160-57-009, 160-57-010, 160-57-011, 160-57-012, 160-57-013, 160-59-005, and 160-59-006). The project site is currently developed with 23 office and light industrial buildings totaling approximately 684,645 square feet, as well as landscaping and surface parking lots. The project site is not all contiguous and is generally bounded by the City and County of San Francisco property (often referred to as the San Francisco Public Utilities Commission [SFPUC] right-of-way or Hetch-Hetchy right-of-way) to the north, East Middlefield Road to the south, Ellis Street to the west, and the Sunnyvale Municipal Golf Course and State Route (SR) 237 to the east.

The project site is located adjacent to the Valley Transportation Authority's (VTA) Middlefield Light Rail Station and the VTA multi-use path is located on the west side of the light rail tracks within and to the south of the project site. The path connects from Pacific Drive to Middlefield Road and from Middlefield Road to the north property boundary of 475 Ellis Street. The Hetch-Hetchy/Transit Oriented Development (TOD) Trail is located approximately 65 feet west of the project site, across Ellis Street. A regional map and a vicinity map of the project site are shown on Figure 3.2-1 and Figure 3.2-2, respectively, and an aerial photograph of the project site and surrounding land uses is shown on Figure 3.2-3.

Additional construction staging (including construction parking) would occur on APNs 160-57-016 and 160-55-036 located at 405 Clyde Avenue and 580 Clyde Avenue, respectively (refer to Figure 3.2-2 and Figure 3.2-3).

3.2 PROJECT DESCRIPTION

Implementation of the proposed project would allow for the demolition of the existing improvements (i.e., approximately 684,645 square feet of office uses, related surface parking areas, and landscaping) and development of:

- Up to 1,317,000 square feet of office uses (resulting in a net increase of 632,355 square feet of office square footage compared to existing conditions),
- Up to 1,900 residential units (including up to 380 affordable units),
- Up to 30,000 square feet of ground floor retail space, and
- Up to 20,000 square feet of community/civic uses.

The proposed project would also include:

- Dedication of land for three new public parks totaling approximately 7.28 acres and a 2.87-acre POPA developed by the applicant. In total, up to 10.15 acres of publicly accessible park land would be provided within the project site;

- New vehicular circulation, including up to six private streets and an extension of Logue Avenue (an existing public street), new on-street and off-street bicycle and pedestrian improvements, and new landscaping and trees; and
- As a project option, the applicant could develop a private district utilities system with underground utility lines to serve some buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. If the District Utilities System Option is selected, one of the office buildings (Building O1) would contain a 45,000 square foot Central Utility Plant (CUP) and the system would require crossing the VTA light rail line and public streets to serve the project area.

In addition to the improvements described above, the project includes a Vesting Tentative Map to create up to 18 lots, up to 1,900 condominium lots, and up to 140 vertical lots within the project site, as well as a Development Agreement to grant implementation of entitlements over a 20-year period. The primary aspects of the project are described below and include the following:

- Buildings
- Parks and open space
- Utilities
- Emergency generators
- Green building and emission reduction features
- Site access, circulation, transit, and parking
- Transportation Demand Management (TDM)
- Construction activities and phasing
- Heritage trees and landscaping

3.2.1 Buildings

The project includes the following buildings:

- Five office building locations (see buildings O1 through O5 on Figure 3.2-4)[3]
- Two affordable residential building locations (see buildings R4 AFF and R6 AFF on Figure 3.2-4)
- Seven residential mixed-use building locations (see buildings R1 – R6 on Figure 3.2-4)[4]
- Two, shared district parking structures (see Figure 3.2-4)
- One community/civic building located within Ellis Park

The proposed site plan with the building locations is shown on Figure 3.2-4 and conceptual residential and office building elevations are shown on Figure 3.2-5 and Figure 3.2-6 below. A summary of the proposed buildings is included in Table 3.2-1. The maximum building heights would range from 16 to 125 feet. Parking for all of the office and residential buildings would be provided in surface, above ground, and/or below ground parking facilities. Buildings labeled AFF on Figure 3.2-4 indicate affordable residential buildings that could be constructed independently from the market rate buildings with the same number. For example, buildings R4 and R4 AFF are two separate buildings, located

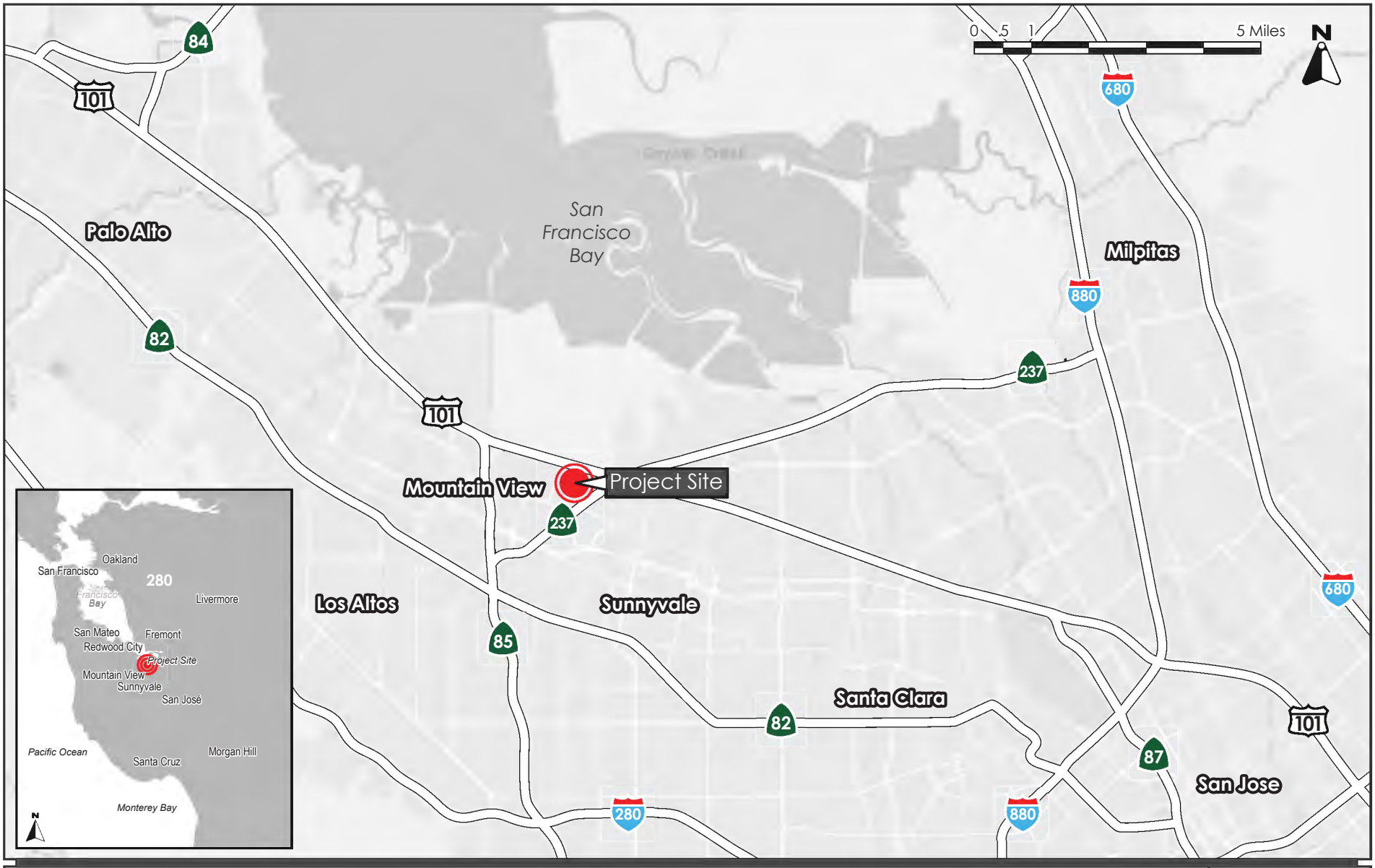
[3] Up to two buildings could be constructed on each building location for a total of up to 10 office buildings on-site.
[4] Up to two buildings could be constructed on each residential building location, excluding R6 AFF, for a total of up to 11 residential buildings.

within the same area shown on Figure 3.2-4.

Table 3.2-1: Proposed MPMP Buildings						
Building Number	**Uses**	**Gross Square Feet**	**Units**	**Maximum Building Height (feet)[5]**	**Vehicle Parking Provided[6]**	**Maximum Depth Excavation (feet)**
O1	Office	441,939	--	125	450 spaces (two levels below ground)	50
	Central Utility Plan	45,000				
O2	Office	190,000	--	95	250 spaces (one level above ground)	5
O3	Office	310,000	--	95	150 spaces (one level above ground)	5
O4	Office	292,212	--	95	150 spaces (one level above ground)	5
O5/P1	Office	82,849	--	65	1,334 spaces (one level below grade, four levels above ground)	5
	Parking Garage					
P2	Community/ Civic	4,000	--	65	315spaces (four levels above ground)	5
	Parking Garage					
R1	Residential	320,000	400	125	467 spaces (one below ground, one above ground)	20
	Retail	18,308	--			
R2	Residential	363,000	450	125	500 spaces (one level below ground, one level above ground)	20
	Retail	4,200	--			
	Community/ Civic	8,434	--			
R3	Residential	263,000	270	95	287 spaces (one level below ground, one level above ground)	20
	Retail	2,877	--			
	Community/ Civic	1,666	--			
R4 AFF	Residential (Affordable)	190,000	210	95	105 spaces (one level below ground and one level above ground)	20

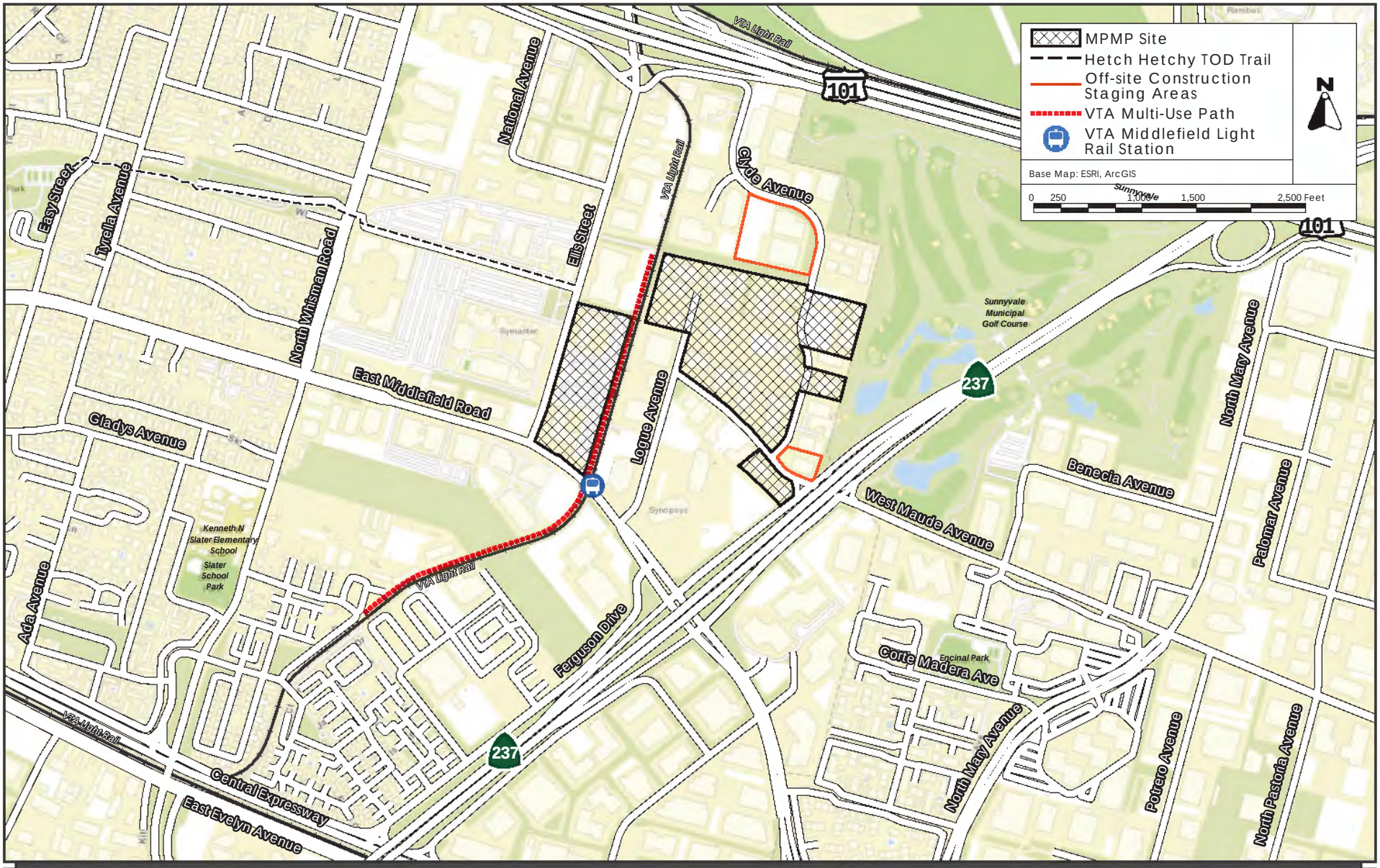
[5] All building heights would comply with the height limits of the Moffett Field Comprehensive Land Use Plan.
[6] Parking is identified as a maximum and may be less if the project parking program includes unbundled residential parking, shared parking, or other measures.

Table 3.2-1: Proposed MPMP Buildings						
Building Number	**Uses**	**Gross Square Feet**	**Units**	**Maximum Building Height (feet)[5]**	**Vehicle Parking Provided[6]**	**Maximum Depth Excavation (feet)**
R4	Residential	95,000	90	95	103 spaces (one level below ground, one level above ground)	20
	Retail	1,955	--			
	Community/ Civic	1,666	--			
R5	Residential	340,000	310	95	332spaces (one level below ground, one level above ground)	20
	Retail	2,660	--			
	Community/ Civic	3,234	--			
R6 AFF	Residential (Affordable)	155,000	170	95	85 spaces (one level below ground, one level above ground)	20
Ellis Park	Community/ Civic	1,000	--	16	N/A	3
Proposed Building Totals and Dwelling Units by Land Use						
--	Office	1,317,000	--	--	--	--
--	Community/ Civic	20,000	--	--	--	--
--	Residential	1,726,000	1,900	--	--	--
--	Retail	30,000	--	--	--	--



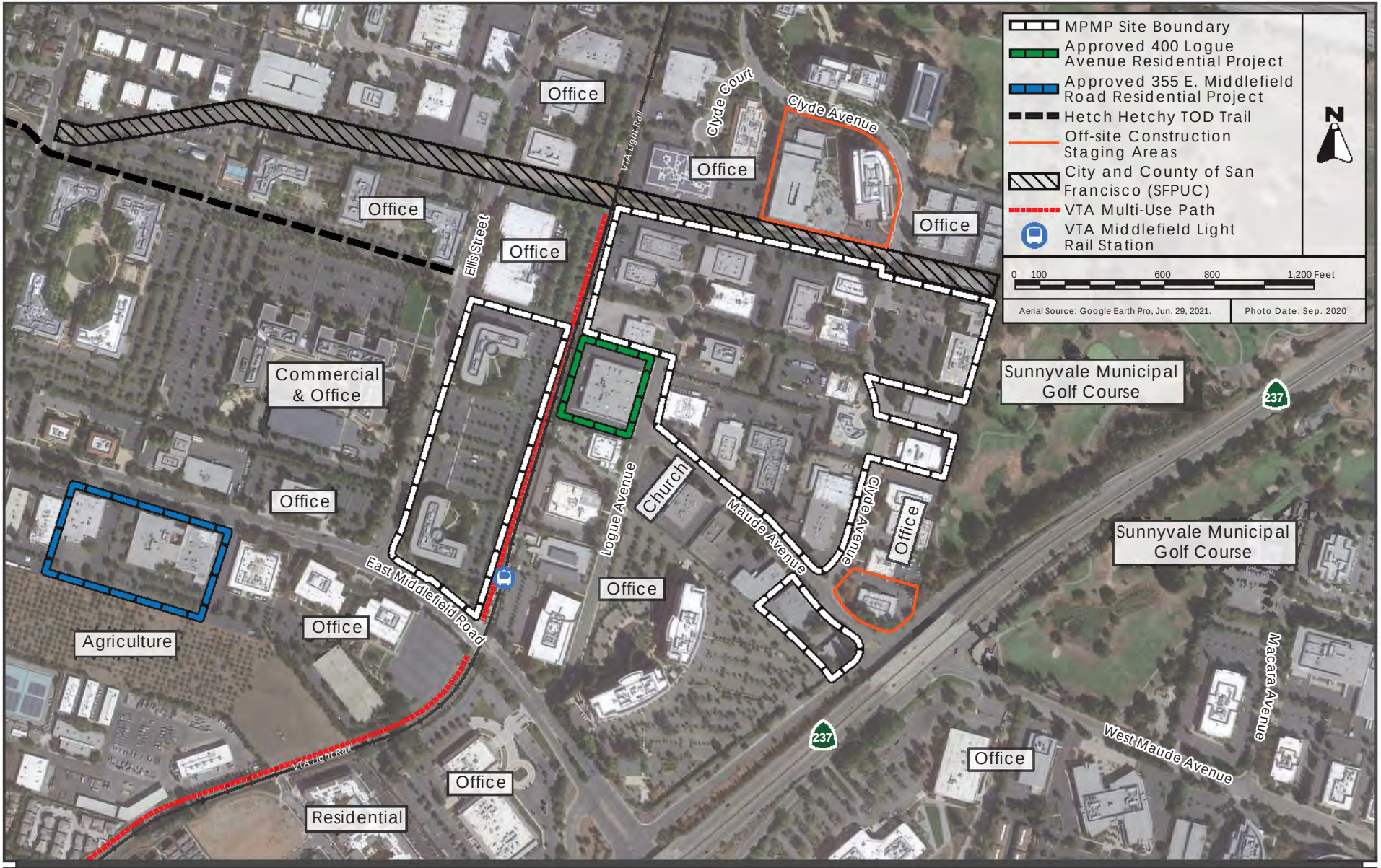
REGIONAL MAP

FIGURE 3.2-1



VICINITY MAP

FIGURE 3.2-2

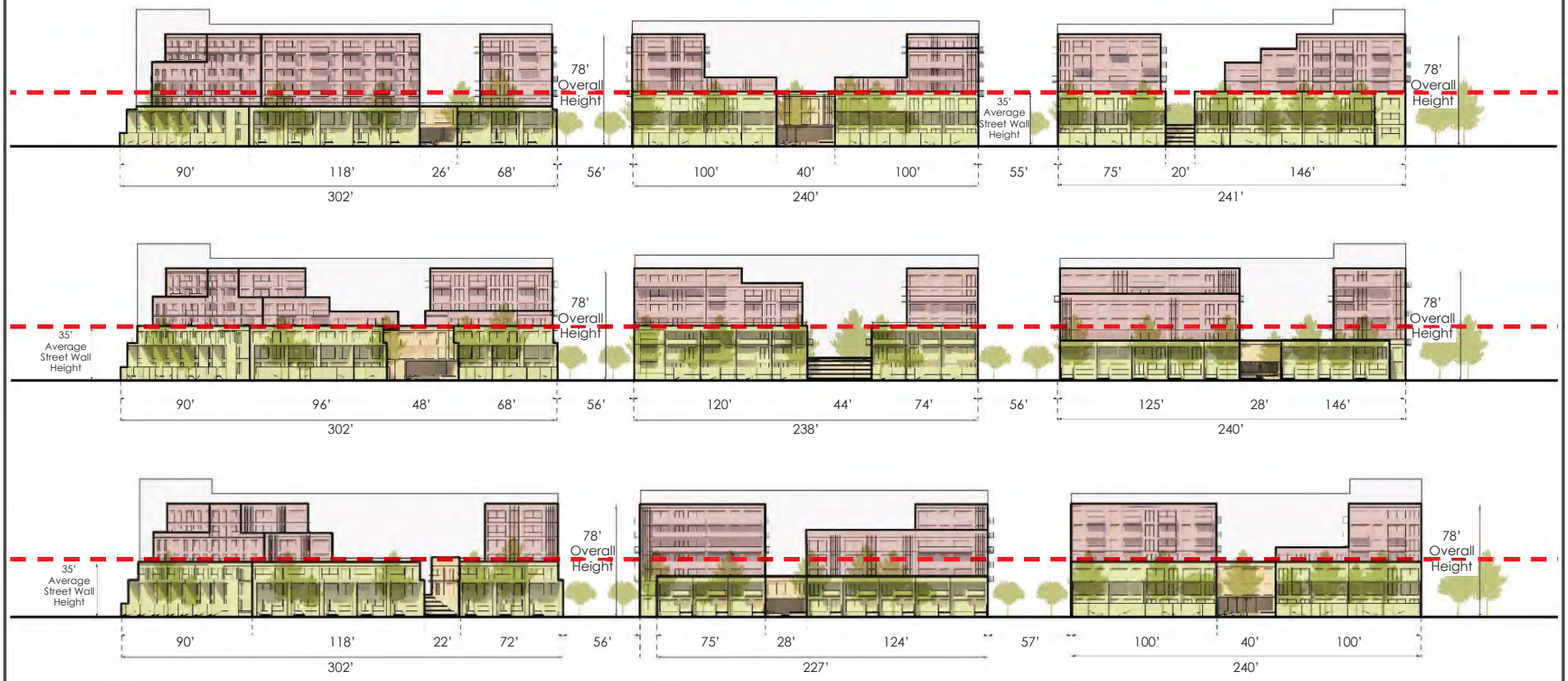


AERIAL PHOTOGRAPH OF THE MPMP SITE AND SURROUNDING AREA | FIGURE 3.2-3

Source: Google, LLC, January 2022.

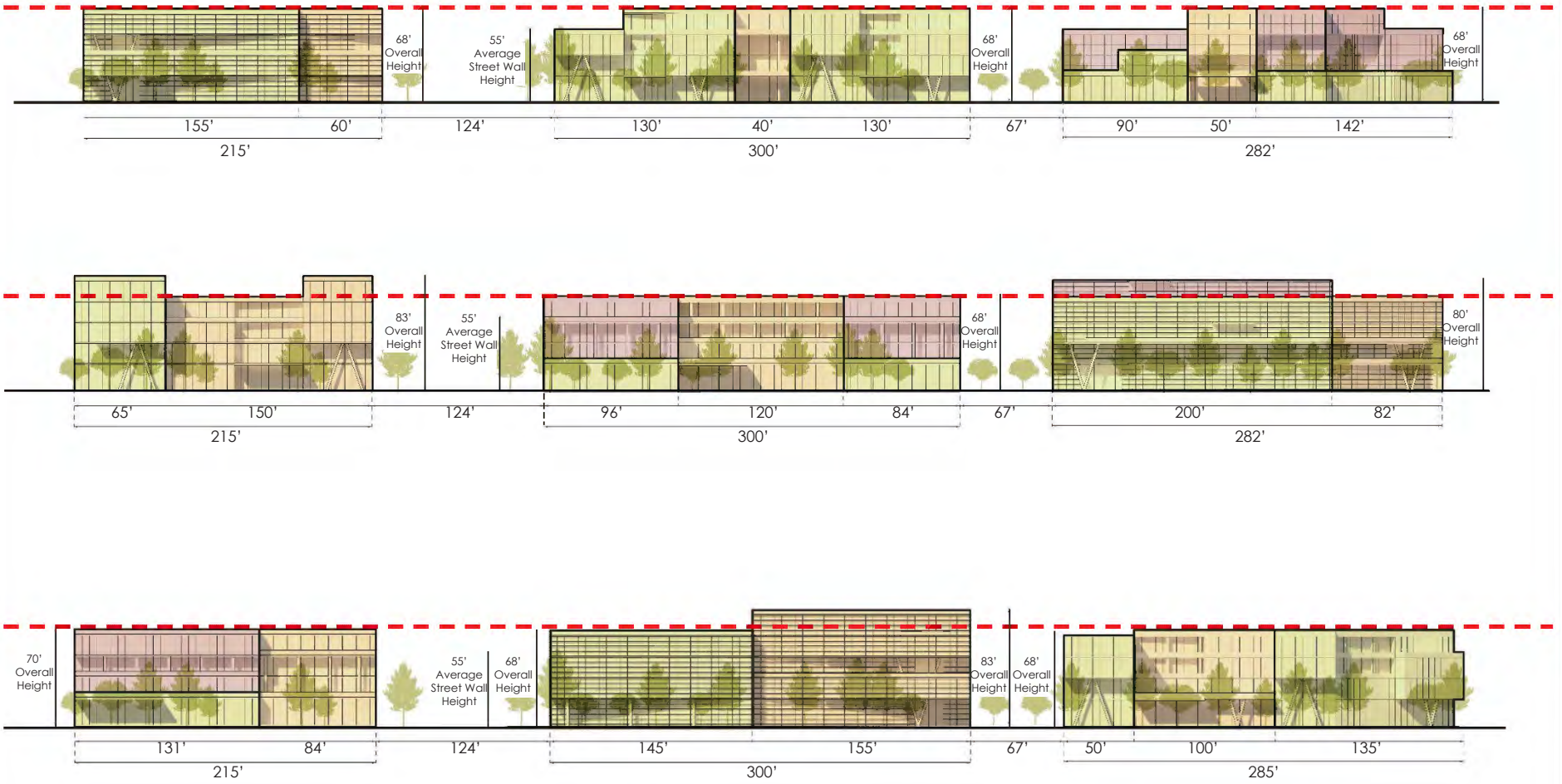
CONCEPTUAL SITE PLAN

FIGURE 3.2-4



Source: Google, LLC, January 2022.

CONCEPTUAL RESIDENTIAL BUILDING ELEVATIONS | FIGURE 3.2-5



Source: Google, LLC, 2022.

CONCEPTUAL OFFICE BUILDING ELEVATIONS

FIGURE 3.2-6

3.2.2 Parks and Open Space

The MPMP project includes a network of privately-owned publicly accessible open space, dedicated public park land, and private open space. Four parks (Ellis Park, Maude Park, Canopy Walk, and Gateway Park, totaling up to 10.15 acres) are planned within the project site as described below and shown in Figure 3.2-7.

- Ellis Park would be up to 2.87-acres of POPA open space located adjacent to Buildings R1, R2, O1, and the light rail tracks. It would include a plaza area with outdoor seating, recreational amenities, flexible open area for temporary uses and events, as well as a landscaped multi-use path connecting to a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The recreational amenities may include bike parking, exercise equipment, communal/educational garden, sport courts, and a 1,000 square foot community room/restroom building. Ellis Park would be constructed by the project applicant concurrent with Buildings R1, R2, and O1.
- The project applicant would dedicate up to 7.28-acres to the City of Mountain View for the future development of the remaining public parks (Canopy Walk, Maude Park, and Gateway Park). Design-level details for Canopy Walk, Maude Park, and Gateway Park are unknown at this time; therefore, this document provides a programmatic analysis of these parks. Subsequent environmental review will be completed if required when the designs of these parks are known and proposed by the City.

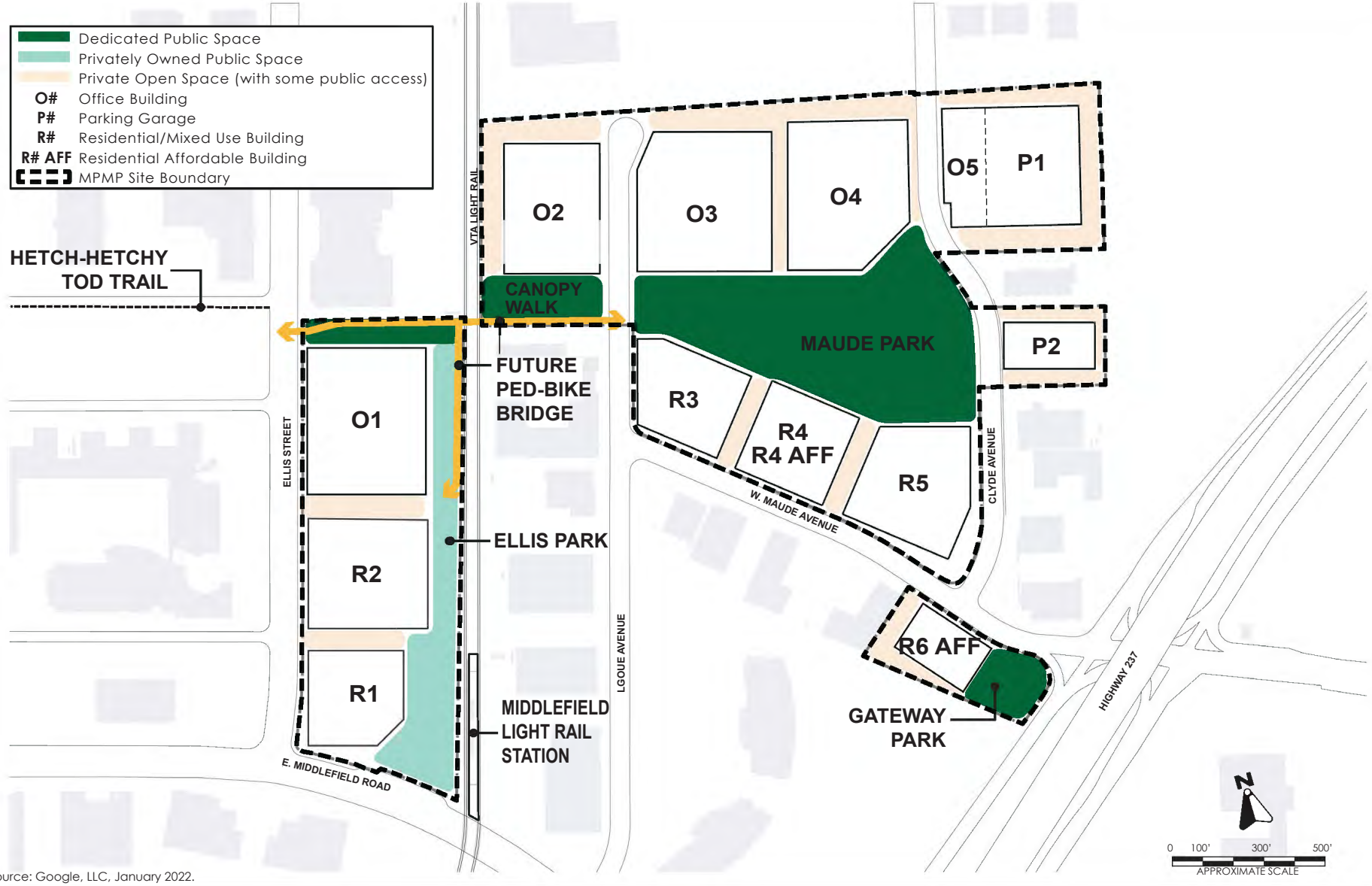
The land dedicated to the City for Canopy Walk is anticipated to include a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The future overcrossing would provide connection to the Hetch-Hetchy/TOD Trail to the west, through the project site into Sunnyvale via Maude Avenue to the east. Design-level details of the bridge overcrossing are unknown at this time; therefore, this document provides a programmatic analysis of the overcrossing and subsequent environmental review will be required when design-level details are known and proposed by the City.

The MPMP also includes approximately 97,140 square feet (or 2.23 acres) of private open space around the buildings. The private open space areas would consist of landscaping and trees, some of which may be accessible to the public.

3.2.3 Utilities

Utilities for the proposed project would be provided by the City of Mountain View (for water, fire service water, wastewater, stormwater), Pacific Gas and Electric (PG&E) (for natural gas and electrical service) and/or Silicon Valley Clean Energy (SVCE) (for electrical service).[7] Additionally, as an option, the applicant is considering development of an independent private District Utility System to serve the proposed MPMP buildings and further the applicant's corporate sustainability goals. These two utility options are described in detail below and analyzed throughout this EIR.

[7] Electrical service for the proposed project and District Utilities System Option would be carbon free 100 percent renewable regardless of the service provider.



Source: Google, LLC, January 2022.

CONCEPTUAL OPEN SPACE PLAN

FIGURE 3.2-7

3.2.3.1 *Municipal Utilities*

The preferred option for the project is to connect to existing utility lines in Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue for water, fire service water, wastewater, and stormwater service. The project would connect to the existing electrical transmission infrastructure for electrical service. Ground floor retail areas of Buildings R1 and R2 would connect to existing PG&E natural gas lines in Ellis Street.[8] The remaining residential and commercial buildings on-site would be 100 percent electric. Based on the anticipated increase in load demand for the project, PG&E would install 12 kilovolt (kV) underground circuits to the project site via a connection at Ellis Street for distribution to the rest of the MPMP buildings. An existing private nitrogen gas line that runs through the north end of the project site would be relocated during project construction. Additionally, the project would include undergrounding of some existing electrical utility lines within the project boundaries. The City is currently analyzing the feasibility of extending the municipal recycled water system to the Precise Plan area. The feasibility report was not completed during the preparation of this EIR; therefore, recycled water is not included in the municipal utilities option for the project.

3.2.3.2 *District Utilities System Option*

Alternatively, the project could construct a private district utilities system with underground utility lines to serve buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. Water and fire water service would be provided by the City. This option is being considered by the applicant to further their corporate sustainability goals and the applicant considers this option to be more efficient than business-as-usual municipal utilities systems.

Operation of the CUP would be in addition to continued operation of the City's existing utilities systems because the City must ensure the existing utilities systems can accommodate the proposed development in the event the district utilities system is offline and to plan for citywide service-capacity needs. Therefore, this EIR evaluates the proposed district utilities system facilities as "additive" to existing utility operations, rather than as a replacement for such existing utilities.

The district utilities system components are described below.

Central Utility Plant

The District Utilities System Option includes an approximately 45,000-square foot CUP, which would provide wastewater treatment, recycled water production, heating, and cooling for most of the buildings within the project site.[9] The CUP would be located within Building O1 either at ground level or in one of the below ground parking levels. Cooling towers would be constructed on the rooftop of Building O1 to provide the additional heat rejection for the CUP. The air source heat pumps installed initially on the rooftops at R1/R2 in Phase I would be relocated to the rooftop of O1 in Phase II and would be 10 feet in height. The rooftop open cooling towers would be approximately 20 feet in height. The construction phases are discussed in Section 3.2.6.

[8] Per City Code Chapters 8, 14, and 24, an exception to the City's Reach Code is required to include natural gas for retail uses.
[9] Building R4 AFF and R6 AFF would be served by municipal utilities under the District Utilities System option.

Wastewater Treatment Plant and Recycled Water Generation

The CUP would include a wastewater treatment plant that would have capacity to treat an average wet weather flow of up to 250,000 gallons of wastewater per day. The proposed wastewater treatment plant would only treat wastewater generated by the connected buildings on-site. It is estimated full build out of the MPMP would generate approximately 263,200 gallons per day of wastewater, which is 13,200 gallons per day more than the treatment capacity of the proposed wastewater treatment plant.[10]

When the treatment plant has reached its daily capacity, or in the event the on-site treatment plant is offline, the excess wastewater generated by the project would be discharged to the City's municipal wastewater conveyance system and treated at the Palo Alto Regional Water Quality Control Plant (PARWQCP) via existing sanitary sewer lines located in Ellis Street. Solids produced by the wastewater treatment plant on the project site would either be regularly hauled to an appropriate processing facility in sealed containers or combined with excess wastewater generated by the project and discharged through the City's municipal wastewater conveyance system.

Wastewater generated by the project would be discharged from each building by a pump station and conveyed via gravity sanitary sewer lines within the site to the proposed CUP/wastewater treatment plant within Building O1. Once at the wastewater treatment plant, wastewater would undergo a multi-step treatment process including screening, primary filtration, secondary biological treatment, tertiary filtration, and disinfection to remove solids, pollutants, and harmful pathogens.

Recycled water produced by the wastewater treatment plant would achieve recycled water standards as described under Title 22 of the California Code of Regulations and would be used for non-potable demands on-site including toilet flushing, cooling, and irrigation. Excess recycled water generated at the CUP would be stored in multiple tanks totaling 125,000 gallons capacity within the basement of Building O1 and could be made available to adjacent properties outside of the project site or open spaces within the project site in order to further reduce potable water use.

Appropriate measures and technology solutions would be designed and implemented to ensure objectionable odors generated by the wastewater treatment plant are within the regulatory compliance limits and do not impact the public. Odor controls would be designed using the best available technology and consistent with regulatory requirements. The most odorous processes, which result in the production of hydrogen sulfide and ammonia, would be enclosed and critically controlled. The project would also include regular monitoring of complaints and reporting on the success of odor controls to regulatory agencies. Specific solutions to odor complaints may include:

- Active ventilation (foul air blowers) to odor control units (e.g., carbon absorption, biofiltration, or ammonia scrubbers);
- House odorous processes in a ventilated enclosure;
- Wastewater screenings[11] and grit would be washed, dewatered, and compacted before being stored in enclosed, odor-proof refuse containers;
- Haul any stored residuals off-site at regular intervals; and

[10] Schaaf & Wheeler. *Middlefield Master Plan Utility Impact Study.* April 18, 2022.
[11] Wastewater screenings refers to inert materials that are present within raw wastewater and are removed in the early stages of the wastewater treatment process.

- Ferrous chloride injection for hydrogen sulfide removal in primary sedimentation tanks to provide chemically enhanced primary treatment as needed for odor control at specific wastewater treatment processes.

Buildings would be served by the on-site wastewater treatment plant and have a back-up connection to the City's municipal wastewater conveyance system, which could be used as a primary connection should future owners or building occupants choose not to operate the on-site wastewater treatment plant, or as back-up if the treatment plant is temporarily down for repairs or servicing.[12] The proposed sanitary sewer network would rely on a low-pressure sewer system independent from the stormwater and rainwater collection systems, to prevent infiltration and inflow. Wastewater would be collected at each building either via gravity sanitary sewer lines or a low-pressure sewer network and routed to the wastewater treatment plant within the CUP. The wastewater treatment plant would be installed in Phase II of construction. During Phase I of construction, a temporary connection to the municipal sewer system would be required and utilized.

Building Heating and Cooling

Heating and cooling for all buildings on-site would be provided by geothermal energy and a combination of heat recovery chillers, air source heat pumps, and cooling towers. The geothermal system would include tubing installed within dedicated bores under the various buildings and connected to pipes in the district utility distribution system, through which water circulates below the ground surface (bgs). Because ground temperatures remain relatively stable throughout the year, water within the pipes underground is warmer or cooler than the average air temperature. Therefore, when water is circulated in the pipes from beneath the ground and throughout the building, it provides a passive warming or cooling effect in the building. The ASHP would be located on the roof of Building O1 and would distribute hot or chilled water to the various buildings. Heat recovery chillers would be located in a mechanical room within Building O1.

Construction of the geothermal system would include drilling and installation of the vertical geo bores beneath each of the proposed buildings and connection of the distribution system. It is estimated that approximately 2,820 vertical bores of six inches in diameter, spaced 18 feet apart, would be drilled approximately 85 to 110 feet bgs of each proposed building.

Temporary ASHP units would be installed on the rooftop of Buildings R1 and R2 to provide temporary heating and cooling for these buildings prior to construction of the CUP (which is to be constructed in Phase II). Those temporary ASHP units would then be transferred to the rooftop of Building O1 during Phase II of construction.

[12] For the EIR analysis, Buildings R4 AFF and R6 AFF are assumed to be served by the City's municipal wastewater conveyance system to ensure impacts to the City's system were considered. In the event these buildings would be served by the on-site wastewater treatment plant, additional environmental review may be required.

Microgrid System

The proposed buildings would be all electric – no natural gas would be used, with the potential exception of Buildings R1 and R2 where natural gas connections would be provided in the ground floors for commercial/restaurant uses.[13]

It is estimated the project would use a total of approximately 35.7 million kilowatt (kWh) of electricity per year.[14] Approximately 20 percent (or 7.2 million kWh per year) of the electricity demand for the proposed project would be generated on-site by rooftop photovoltaic panels located on each of the proposed buildings under the project without District Utilities System Option. Under the District Utilities System Option, a greater rooftop surface area would be available for photovoltaic panels because mechanical equipment for building heating and cooling which is traditionally located on the roof would be located in the CUP under this project option, allowing for greater solar generation on-site. Under the project with District Utilities System Option, approximately 30 percent (or 10.7 million kWh per year) of the electricity demand for the proposed project would be generated on-site by rooftop photovoltaic panels located on each of the proposed buildings. The project's remaining electricity demand (under either option) would be supplied by the PG&E distribution network. Solar energy generated on-site would be stored within on-site battery storage units. The battery units would be located within the CUP or distributed in battery rooms at each building. If in the CUP, batteries would be located either in the basement of Building O1 or in an enclosure adjacent to the building at grade. The battery storage units would be pad-mounted and seismically restrained on the finished grade/floor per manufacturer recommendations and include proper catchment systems designed for protection from coolant leakage and fire.[15]

District Distribution System and Building Connections

In order to transport wastewater, recycled water, hot and chilled water, and electricity to each of the buildings and parks in the Master Plan, a district distribution system consisting of underground cabling and a series of below ground insulated pipes ranging from four to 16 inches in diameter, would be constructed. These cables and pipes may be direct buried or buried within an encasement (referred to as a utilidor) and would require undercrossing the right-of-way and property owned by public agencies such as the City of Mountain View and the VTA. The underground cabling and pipes would connect and provide service between the buildings, CUP, and microgrid system. Additionally, each building would include a connection room with pumping and energy transfer equipment for the thermal network as well as break-out tank and backflow preventers for the recycled water supply. Each connection room would also include metering and control equipment to track overall consumption, monitor efficiency, and enable integrated control.

[13] Per City Code Chapters 8, 14, and 24, all new construction buildings are required to be electric. Natural gas may be used for commercial spaces with specialized equipment that cannot operate with electric service (e.g., a restaurant with a pizza oven) subject to City approval.

[14] Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

[15] Battery space selection and design shall be coordinated with the City Fire Marshall for fire hazard protection.

3.2.4 Emergency Generators

The project would include 11 emergency back-up generators located within the basements of Buildings R1, R3 through R5, R4 AFF, R6 AFF and O1 through O5. The back-up generator in Building R1 would provide back-up power to Buildings R1 and R2. All generators would be diesel powered. The six generators located within the proposed residential buildings would have a power rating of 500 kW and the generators within the proposed office buildings would have a power rating of 900 kW.

3.2.5 Green Building and Emissions Reduction Features

Consistent with the Development Standards and Bonus Floor Area Ratio (FAR) Standards for non-residential development projects within the Precise Plan area, the proposed office buildings would meet the intent of Leadership in Energy and Environmental Design (LEED) Platinum. Residential buildings requesting Bonus FAR would achieve the equivalent of a GreenPoint rating of 120 points or better and must use submetering per unit, or other appropriate technology, to track individual energy use for each residential unit. All new buildings are required to install dual plumbing for potable and recycled water use, per the City's current codes. In addition to the Green Building standards required by the Precise Plan, the preferred project (i.e., the project without the District Utilities System Option) would also incorporate the following green building features:

- **Photovoltaic System:** At least 50 percent of the rooftops of each building within the project site would be equipped with rooftop photovoltaic systems. It is estimated that approximately 20 percent of the project's electricity demand would be provided by solar power generated on-site.
- **Water Efficient Landscaping:** Water efficient irrigation systems would support native, drought tolerant plants compatible with recycled water through the project site.

If the District Utilities System Option is selected, the project would include the following additional green building measures:

- **Geothermal System:** The project would include a district thermal system which would provide heating and cooling to the proposed buildings via a closed loop system to optimize efficiency as described in 3.2.3.2 above.
- **Microgrid System:** Each building would be equipped with a rooftop photovoltaic system. Solar energy generated on-site would be transported via electric lines below ground to the battery units in Building O1. It is estimated that approximately 30 percent of the project's electricity demand would be provided by the microgrid system.
- **Water Efficient Building Systems:** The project would include an on-site wastewater treatment plant which would supply recycled water to the project. All buildings would be dual plumbed and served by recycled water supplies for mechanical operations, irrigation, and toilet flushing.

3.2.6 Construction Activities and Phasing

Construction activities associated with the project would include demolition, site preparation, grading and excavation, building construction, architectural coatings, paving, and landscaping. The build out of the MPMP project would occur over four phases and take a total of approximately 8.5 years.[16] During this time, construction activities would occur between 7:00 a.m. and 6:00 p.m., Monday through Friday, and Saturday and Sunday only with written approval of the Chief Building Official per City Code (Chapter 8).[17] As noted in Table 3.2-2, the maximum depth of excavation required would range from five to 50 feet bgs for the proposed buildings and 85 to 110 feet bgs for geothermal bores under the District Utilities System Option. The geothermal bores would be drilled using the mud rotary drilling technique.[18]

Approximately 749,425 cubic yards of soil would be exported from the site to accommodate the proposed below ground parking, building foundations and footings, and utilities. If the District Utilities System Option is selected, the project would require export of up to an additional approximately 40,000 cubic yards of soil. Construction staging and parking would primarily occur on-site and on two adjacent parcels (APNs: 160-57-016 and 160-55-036) located at 405 Clyde Avenue and 580 Clyde Avenue. A summary of the proposed phasing is shown in Table 3.2-2 below.

Table 3.2-2: Construction Phasing for Proposed Project & District Systems Option

Phase	Buildings to be Constructed	Estimated Start Date	Estimated End Date
I	R1, R2, R6 AFF, and the southern half of Ellis Park	11/1/2022	05/01/2025
II	O1[1], O2, and northern half of Ellis Park	11/01/2024	07/13/2029
III	R3, R4, R4 AFF, and R5	01/01/2026	02/01/2030
IV	O3, O4, O5, P1, and P2	04/01/2026	04/19/2031

[1] If the District Utilities System Option is constructed, the CUP would be constructed with Building O1. The geothermal and wastewater treatment plant would be delivered to the site pre-manufactured and would be assembled within Building O1.

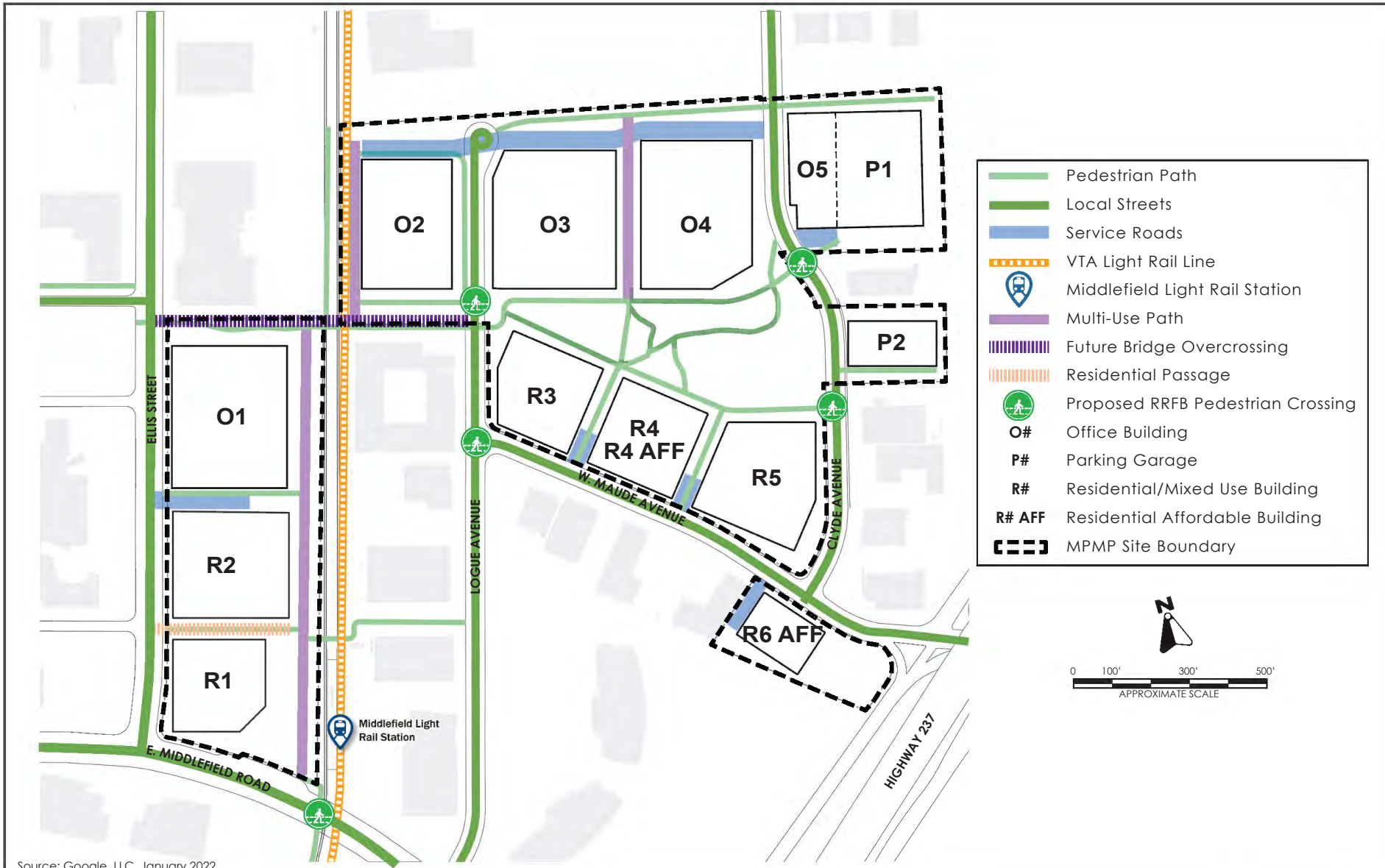
[16] While construction activities would take a minimum of 8.5 years to complete, the project includes a Development Agreement that allows the applicant to act on project entitlements for up to 20 years. The EIR analyses, including the construction air quality and noise analyses, conservatively assumes approximately 8.5-year construction period.
[17] City of Mountain View. City Code Chapter 8, Article VI, Section 8.70. Accessed October 26, 2021.
[18] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021. Page 3.

3.2.7 Site Access, Circulation, Transit, and Parking

A site access and circulation map is shown on Figure 3.2-8. Vehicle access to the project site would be provided via driveways on Ellis Street, East Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue. Six separate private service roads for direct parking access, delivery/service trucks, garbage and recycling collection trucks, shuttle buses, and emergency vehicles are proposed throughout the project site and would be accessible via two points on Ellis Street (a private service street to access O1 and R2 and a driveway to access R1 and R2 parking), two service streets on Maude Avenue, two service streets off Logue Avenue (one north of Building O2 and one north of Building O3 that would provide connection to Clyde Avenue), and one service street off Clyde Avenue for Building O5/P1. Parking garages at P2 and R6 AFF would have private driveways with direct access from the adjacent public street to the respective parking and service collection areas.

Pedestrian and bicycle access to and around the site would be provided via a network of new multi-use paths throughout the site. Wider paths for pedestrian and bicycle access to the site would be provided in the form of shared facilities and sidewalks on the six new private service streets, new multi-use paths and greenways in between buildings where no service street is located, and improved and new sidewalks and bike lanes along existing public streets (as shown on Figure 3.2-8). Additionally, the project would include:

- Dedication of park land for a future bicycle and pedestrian bridge overcrossing of the light rail line to allow the expansion of a park trail network;
- Installation of new midblock crossings and modifications to existing midblock crossings;
- Improvements to an existing bus stop on Middlefield Road adjacent to the Light Rail Station including:
    - A new midblock pedestrian crossing to connect the north and south ends of an existing VTA multi-use path along the west side of the light rail tracks;
    - A new bus shelter and bench;
    - A driveway with bollards to restrict access to emergency vehicles;
    - A 120-foot in-lane bus stop or bus duck-out (out-of-lane) stop (to be decided)*;*
    - A raised protected bike lane along the bus stop or buffered on-street bike lane (to be decided)*;*
    - A bus island for loading/unloading passengers (to be decided); and
    - Maintaining the existing stop location or shifting the stop westward toward Ellis Street intersection (to be decided);
- Construction of wider sidewalks with landscaping along project frontages and new private service streets; and
- Bicycle improvements including construction of Class II buffered on-street bike lanes on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, and a Class IV protected bike lane along Middlefield Road in front of the project.



Source: Google, LLC, January 2022.

CONCEPTUAL CIRCULATION PLAN

FIGURE 3.2-8

The midblock crossing on Middlefield Road near the Middlefield Light Rail Station would require separate approval by the California Public Utilities Commission in coordination with the VTA. The project would include a total of 4,528 spaces within the proposed office, parking structure, and residential mixed-use buildings.[19] Refer to Table 3.2-1 above for a breakdown of the parking spaces by building/parking structure. Short and long-term bicycle parking would also be provided within or adjacent to the entrances of each office and residential building and would meet the Precise Plan bicycle parking requirements (refer to Table 3.2-3).

Table 3.2-3: Precise Plan Bicycle Parking Requirements

Land Use	Short-Term	Long-Term
Residential	1 space per 10 units	1 space per unit
Office	1 space per 20,000 square feet or minimum 4 spaces, whichever is greater	1 space per 2,000 square feet or minimum 4 spaces, whichever is greater
Neighborhood Commercial Uses (Retail/Community/Civic Uses)	4 per 5,000 square feet or minimum 2 spaces, whichever is greater	1 per 5,000 square feet or minimum 2 spaces, whichever is greater

Source: City of Mountain View. *East Whisman Precise Plan.* November 2019. P. 90.

3.2.8 Heritage Trees and Landscaping

The project site contains 1,032 trees, 310 of which are Heritage trees as defined in the City Code.[20] Of the total trees, 32 are City street trees and 35 are off-site trees in close proximity of the project. There are a total of 77 tree species on-site (refer to Appendix D for additional details regarding tree species, size, and health). Implementation of the project would result in the removal of up to 823 existing trees (approximately 80 percent of the trees), including up to 310 Heritage trees. The project would plant a minimum of 620 new trees throughout the project site and along the project frontages on East Middlefield Road, Clyde Avenue, Maude Avenue, Logue Avenue, and Ellis Street, which is a minimum replacement of two new trees to be planted for every one Heritage tree removed in accordance with Section 32.35 of the City Code. Some of the tree species to be planted include alder, oak, and sycamore trees. In addition to new trees, the project includes new landscaping consisting of native and/or drought-tolerant plants. If the District Utilities System Option is selected, the landscaping for privately-owned parcels within the project site would be irrigated using recycled water (not potable water); however, some potable water would be used until the recycled water infrastructure is constructed in Phase II.

[19] Parking is identified as a maximum and may be less if the project parking program includes unbundled residential parking, shared parking, or other measures.

[20] A Heritage Tree is defined as any one of the following: 1) a tree which has a trunk with a circumference of 48 inches or more measured at 54 inches above natural grade; 2) a multi-branched tree which has major branches below fifty-four (54) inches above the natural grade with a circumference of 48 inches measured just below the first major trunk fork; 3) a quercus (oak), sequoia (redwood), or cedrus (cedar) tree with a circumference of 12 inches or more when measured at 54 inches above natural grade; 4) a tree or grove of trees designated by resolution of the city council to be of special historical value or of significant community benefit. Source: City of Mountain View. *City Code Chapter 32 Article II.* May 24, 2021.

3.2.9 Transportation Demand Management

The Precise Plan requires office and R&D projects with new construction or additions greater than 10,000 square feet and all new development subject to parking maximums (including residential) shall provide a TDM plan with programs and measures to reduce vehicle trips. Pursuant to the Precise Plan, the proposed project is required to incorporate the following TDM measures:

Nonresidential TDM Requirements

- **TDM Plan Site Requirements:** The following site design features shall be in the project to adhere to the required trip cap:
    - Priority parking for carpools and vanpools.
    - Bicycle parking and shower and changing facilities as defined by Chapter 3 of the Precise Plan.
    - Maximum parking and carshare parking as defined by Chapter 3 of the Precise Plan.
    - Site design that supports alternative modes, such as orienting building entrances toward sidewalks, transit stops, and bicycle facilities.
- **TDM Plan Operational Requirements:** The TDM plan shall include the following minimum operational measures though other measures may be needed to achieve the required trip caps:
    - The property owner shall join the Mountain View Transportation Management Association (MVTMA). Tenants may join in lieu of property owners, but if a tenant is unable to maintain membership, the property owner shall be responsible.
    - Monetary incentives for alternative modes, such as subsidized transit passes, bike-share or carpools for office employees.
    - Monetary incentives for alternative modes, such as subsidized transit passes or bike-share and/or unbundled parking for residents.
- **TDM Plan Alternative Requirements:** The TDM plan may include other measures to reach required trip targets, including but not limited to:
    - Shared bicycles if a bikeshare service is not available nearby
    - Parking cash-out, paid parking, or other parking monetization
    - Guaranteed ride home program
    - Telecommute support
    - Alternative work schedules
- **Parking Rationale:** The TDM plan shall demonstrate the parking provided is adequate to serve the needs of the development and shall consider the project's trip-reduction measures.
- **Implementation:** The TDM plan shall identify how the required measures would be implemented and describe other measures proposed to meet or exceed trip reduction goals.
- **Trip Cap:** The Precise Plan established a long-term vehicle trip cap across the entire East Whisman area of 0.83 a.m. and 0.72 p.m. peak-hour trips per 1,000 net new square feet across all office and R&D sites.[21] This area wide trip cap is implemented through a site-specific trip

[21] The Precise Plan identifies an area-wide average of 0.95 a.m. and 0.88 p.m. peak-hour trips per 1,000 square feet of office and R&D sites to minimize vehicle trips into and out of East Whisman gateways. The 600 Ellis Street transportation analysis, prepared by Fehr Peers dated September 2020, analyzed the combination of existing (legacy)

cap, as established through the Precise Plan's Office Trip Cap Phasing Program and Administrative Guidelines. The proposed project would implement a trip cap of 1,097 a.m. peak hour trips and 952 p.m. peak hour trips.

- **Monitoring and Enforcement:** Annual monitoring of the TDM plan shall be conducted through a third party and paid for by the property owner or their representative. It shall include driveway counts and a survey of employee travel modes.

Residential TDM Requirements

- **TMA Membership:** New residential developments with at least 100 units shall become Mountain View TMA members.
- **TDM Plan Site Requirements**: New residential development shall include the following TDM site measures:
    - Maximum parking and carshare parking as defined by Chapter 3 of the Precise Plan
    - Bicycle parking as defined by Chapter 3 of the Precise Plan
    - Residential projects over 100 units shall provide a shared, common, collaborative workspace available to residents and their guest, which can be offered in partnership with nearby residences or businesses.
    - Site design that supports alternative modes, such as orienting building entrances toward sidewalks, transit stops, and bicycle facilities
    - Accessible, secure storage space for grocery and package delivery shall be provided in multifamily development.
- **TDM Plan Operational Requirements:** The TDM plan shall include the following operational measures, or equivalent:
    - Property managers or homeowner associations (HOAs) shall provide access to shared bicycles if bikeshare service is not available nearby.
    - Property managers or HOAs shall provide local transportation information to all residents through a website, leasing office, or initial leasing information.
    - Property managers or HOAs shall support Safe Routes to Schools programs including facilitating parent gatherings and coordination of walking schools buses and/or bike trains.
    - Monetary incentives for alternative modes, such as subsidized transit passes or bike-share for residents and/or unbundled parking.
- **Parking Rationale:** The TDM plan shall demonstrate the parking provided is adequate to serve the needs of the development and shall consider the project's trip-reduction measures.
- **TDM Monitoring:** Annual TDM monitoring shall be conducted by a third party and paid for by the property owner or their representative. It shall include parking counts to measure the peak parking demand and resulting parking rate. The monitoring results shall be submitted to the City.

office development not subject to TDM requirements and future new office development that would be subject to TDM requirements in order to refine the trip generation rate necessary for future new office development to be compliant with the gateway trip cap volumes. The resulting trip cap for new office development is 0.83 a.m. and 0.72 p.m., which includes the incorporation of TDM measures required by the Precise Plan.

In addition to TDM measures required in the Precise Plan, the project would implement the following measures:

- **Design Elements:** The project would fund and construct (or some combination of both) area bicycle and pedestrian network improvements on project site street frontages along Ellis Street, East Middlefield Road, and Logue, Maude, and Clyde Avenues. The mixed-use character of the project would reduce the need for vehicle trips due to increased employment and housing opportunities within a half-mile of the existing Middlefield light rail station combined with potential on-site food, retail, services, and recreation opportunities.
- **Operational Elements:** The project would include commuter shuttle services for office uses, carshare services, first-mile/last-mile micro mobility services, an on-site transportation coordinator, flexible work schedules for employees, marketing and information for the proposed TDM program, pre-tax commuter benefits, biking incentives, bike buddy program, bike loaner program, rideshare matching services, and an expanded carpool matching program. Additional measures such as unbundled residential parking and shared parking may also be considered.

3.3 CONSISTENCY WITH GENERAL PLAN DESIGNATION AND ZONING DISTRICT

3.3.1 General Plan

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan. The General Plan High-Intensity Office designation supports major commercial operations, such as corporations, financial and administrative offices, high-technology industries, and other scientific facilities, as well as supporting retail and other service uses. The General Plan East Whisman Mixed-Used designation promotes a mix of offices, neighborhood-serving commercial, multi-family residential, lodging, and small businesses in the core of the East Whisman area.

3.3.2 Zoning

The project site is zoned P-41 East Whisman Precise Plan (EWPP, Precise Plan). Most of the project site is within the Precise Plan's Mixed-Use Character Area, which is defined as a transit-oriented district with a mix of neighborhood commercial, residential, and office uses where the highest intensity buildings are located near the Middlefield light rail station. This designation allows a mix of low, moderate, and high-intensity uses of office, R&D, multi-family residential, hotel, and retail services. The eastern edge of the project site (east of Clyde Avenue) is located within the Employment Character Area North and is intended for a mix of moderate and higher-intensity office uses with some opportunities for hotels and neighborhood commercial uses off of Ellis Street.

The project proposes to construct approximately 632,355 square feet of net new office space, up to 1,900 new residential units, up to 30,000 square feet of new retail space, and up to 20,000 square feet of community/civic space, representing 31.6 percent of the two million net new square feet of planned office development, 38 percent of the planned 5,000 residential units, and 50 percent of the planned 100,000 net new square feet of neighborhood commercial space previously identified in the adopted Precise Plan. The project proposes the type and scale of development envisioned in the Precise Plan for the Mixed-Use and Employment Character Areas and would be required to comply with the applicable standards and guidelines in the Precise Plan.

Per the Precise Plan, the maximum building heights allowed on the project site ranges across the low, moderate, and high intensity subareas. The Precise Plan provides some additional height allowances, which the project is incorporating (see Table 3.3-1 below).

Table 3.3-1: Precise Plan Maximum Allowed Building Heights by Character Area

Character Areas	Low Intensity Subarea	Medium Intensity Subarea	High Intensity Subarea
Mixed-Use Character Area			
Max. Building Height[1]	N/A	75 feet	95 feet
Max. Building Height with Park Dedication[2]		90 feet	110 feet
Max. Building Height with Park Dedication and Ground-Floor Neighborhood Commercial[3]		95 feet	115 feet
Max. Building Height in High-Rise Core[4]	N/A		135 feet
Employment Character Area North			
Max. Building Height[1]	60 feet	N/A	N/A
Max. Building Height with Ground-Floor Neighborhood Commercial[3]	65 feet		

[1] Up to an additional 10 feet is permitted for architectural features for rooftop amenities (with a provisional use permit) or at key corners. Elevator overruns may be allowed additional height for rooftop access.

[2] Up to 10-15 feet of additional height for one typical additional story is permitted if land is dedicated for a public park or other public facilities.

[3] Up to 5 feet of additional height is allowed for buildings with ground-floor neighborhood commercial uses

[4] Residential/Mixed-Use in High-Intensity Subarea can propose up to 135 feet in height, inclusive of all additional height allowances/exceptions. No building height can exceed 182 feet above mean sea level per the adopted Moffett Field Comprehensive Land Use Plan (CLUP).

Source: City of Mountain View. East Whisman Precise Plan. November 5, 2019. Pgs. 57 – 59.

The Precise Plan establishes a "base" FAR allowance per subarea for residential/mixed-use and non-residential uses, in addition to a maximum FAR. The "base" FAR for the project site varies from 0.40 for non-residential development to 1.0 for residential/mixed-use development. The maximum FAR allowed ranges from 0.5 to 1.0 for non-residential development and 2.5 to 3.5 for residential/mixed-use development. Any FAR above the "base" is considered "bonus" FAR and subject to additional green building requirements, community benefit requirements, and compliance with the Jobs-Housing Linkage Program as outlined in the Precise Plan.

Table 3.3-2: Allowed and Proposed FAR by Precise Plan Character Area				
Precise Plan Subarea	**Allowed Non-Residential FAR**	**Proposed Non-Residential FAR[1]**	**Allowed Residential/Mixed-Use FAR**	**Proposed Residential/Mixed-Use FAR[2]**
Mixed-Use Character Area				
High-Intensity Subarea	Base: 0.4 Max: 1.0	1.0	Base: 1.0 Max: 3.5	1.66
Medium-Intensity Subarea	Base: 0.4 Max: 0.75	0.75	Base: 1.0 Max: 2.5	1.12
Low-Intensity Subarea	N/A		N/A	
Employment Character Area North				
Low-Intensity Subarea	Base: 0.4 Max: 0.5	0.39	N/A	

[1] Nonresidential FAR includes all building square footage above-grade, excluding above-grade parking, and including the CUP in the project with district utility system option.

[2] Residential/Mixed-Use FAR includes all building square footage above grade, including above-grade parking.

Source: City of Mountain View. *East Whisman Precise Plan*. November 5, 2019. Pp. 68, 72.

The project proposes non-residential FARs ranging from 0.39 to 1.0 and residential/mixed-use FARs ranging from 1.12 to 1.66 with maximum building heights of 16to 125 feet. The project's cumulative combined FAR is 1.46 over the 40-acre project site. The project is proposing to use "bonus" FAR for both residential and non-residential development as permitted in the Precise Plan.

3.4 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of the objectives of the project. The objectives for this project are as follows:

a) Develop the project area with residential and office uses at an increased density and FAR (consistent with the Character Areas development targets in the Precise Plan) near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit.
b) Redevelop the project site with approximately 1,900 new residential units to better balance the City's jobs-housing ratio.
c) Provide approximately 1.3 million square feet of office uses consistent with the Precise Plan and the following General Plan policies:
    - *LUD 3.1: Land use and transportation*. Focus higher land use intensities and densities within a half-mile of public transit service, and along major commute corridors;
    - *LUD 3.8*: *Preserved land use districts*. Promote and preserve commercial and industrial districts that support a diversified economic base;
    - *LUD 9.2: Compatible transit-oriented development*. Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations; and
    - *LUD 14.3: Business attraction*. Attract innovative and emerging technology businesses.
d) Develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan's Jobs-Housing Linkage Program.
e) Implement a robust TDM plan with trip-reduction measures and on-site amenities that promote walking, bicycling, use of shuttles, transit and other transportation alternatives, consistent with the requirements of the Precise Plan.
f) Support VTA's investment in light rail transit by providing transit-oriented residential and commercial development that facilitates pedestrian and bicycle access to and ridership of transit.
g) Implement sustainable building practices promoting energy and water efficiency consistent with the Precise Plan.
h) Dedicate up to approximately seven acres of land to the City for the creation of new public parks to serve the existing uses, the proposed project, and the broader community.
i) Support both Precise Plan goals and City Council and staff guidance through the delivery of people-centric community benefits that help people live, work, play, and stay in Mountain View, including measures that support:
    - Housing opportunities and anti-displacement;
    - Retention and growth of small businesses and workforce development;
    - Safe and expanded connections for pedestrians and bicyclists, while consolidating infrastructure for vehicles; and
    - Quality open space for recreation, relaxation, and entertainment.

3.5 USES OF THE EIR

This EIR provides decision makers in the City of Mountain View and the general public with environmental information to use in considering the proposed project. It is intended that this EIR be used for the discretionary approvals necessary to implement the project, as proposed. These discretionary actions may include, but are not limited to, the list below. This list also includes ministerial permits and approvals.

Agency	Permit/Review Required
City of Mountain View	Discretionary Approvals of: • A Master Plan • A Vesting Tentative Map • Provisional Use Permits • Planned Community Permits • Development Review Permits • Heritage Tree Removal Permits • Change of Use Permits • A Development Agreement Ministerial Approvals of: • Demolition Permits • Grading Permits • Building Permits • Fire/Environmental Protection Permits • Offsite Improvement Plans (including work within the right-of-way, Excavation and Encroachment Permits or Agreements) • Wastewater Discharge Permits (for discharge of domestic wastewater from the onsite treatment plant)
Bay Area Air Quality Management District (BAAQMD)	Permit to construct and authority to operate backup diesel generators, district water reuse facility, and any other stationary sources of emissions.
California Department of Transportation (Caltrans)	Encroachment Permit if within Caltrans right-of-way.
Federal Aviation Administration (FAA)	Determination of No Hazard and/or execution of an avigation easement as deemed necessary.
Federal Energy Regulatory Commission	Potential approval of elements of proposed microgrid distribution network and on-site generation and storage facilities.
US Environmental Protection Agency (EPA)	Review of site contamination related to the Middlefield Ellis-Whisman Superfund Site or other site contamination oversight, including any required remediation actions or protective measures for new construction.
Santa Clara County Department of Environmental Health (DEH)	Review and permits may be required if wells or soil borings are required (for environmental clean-up, for example) or if abandoned wells or septic tanks are proposed to be destroyed during construction of the project.

Agency	Permit/Review Required
San Francisco Regional Water Quality Control Board (RWQCB)	• Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with construction activity. Notice of Intent for construction activities Stormwater Pollution Prevention Plan (SWPPP) for on-site stormwater management and pollution prevention, discharge permit for discharge of municipal wastewater from on-site wastewater treatment plant, industrial discharge permit for discharge of residuals from the on-site wastewater treatment plant, approval of dual plumbed buildings for indoor recycled water use, approval of Title 22 Engineering Report for Recycled Water, Waste Discharge requirements for Water Reclamation Facility and recycled Water Use. • Lead on the permitting process for the onsite wastewater treatment plant and will approve the Title 22 Engineering Report for Recycled Water. • Waste Discharge Requirements for Water Reclamation Facility and Recycled Water Use. • Review of site contamination related to the Hewlett-Packard and E/M Lubricants TCE groundwater plume. This oversight may be deferred to another agency by the RWQCB.
State Water Resources Control Board – Division of Drinking Water	• Approval for dual plumbed buildings in indoor recycled water use • Review of Title 22 Engineering Report for Recycled Water
City of Sunnyvale	Encroachment Permits or Agreements for work within Sunnyvale's public right-of-way
PG&E	Agreement for microgrid system (Project with District Utilities System Option only)
Valley Transportation Authority (VTA)	Review and approval of encroachment of utilities under the VTA light rail lines, inspection of bus stop modifications on Middlefield Road, and applicable permits for the proximity of construction activity to the light rail station, including safety upgrades.
Valley Water (SCVWD)	Approvals of proposed geobores. Review and approval may be required if wells are required or if abandoned wells are proposed to be destroyed during construction of the project.
California Public Utilities Commission (CPUC)	Approval of permits (potential GO-88B process) for the midblock crossing of Middlefield Road at Middlefield Light Rail Station, and safety upgrades. Some approvals may be in tandem with VTA approval.

SECTION 4.0 NEW SIGNIFICANT ENVIRONMENTAL EFFECTS

As noted in Section 2.0 Introduction above, the proposed project would implement a large portion of the East Whisman Precise Plan, which was analyzed in a Program EIR that was certified by the City in 2019.

Per Section 15162 of the CEQA Guidelines, where an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines that substantial changes are proposed in the project which will involve new or more severe impacts; new circumstances involve new or more severe impacts; or new information of substantial importance is available, requiring new analysis or verification.

Section 15163 of the CEQA Guidelines provides that the lead agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

The existing conditions and overall amount and location of development in the Precise Plan remains the same with the proposed project as analyzed in the Precise Plan EIR. Therefore, the cumulative, growth inducing, and irreversible impacts remain the same with the proposed project as disclosed in the Precise Plan EIR. This section includes a discussion of the additional significant effects of the project on air quality which were not previously disclosed in the Precise Plan EIR. The discussion for air quality includes the following subsections:

Environmental Setting – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.

Impact Discussion – This subsection includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts. The impact discussions apply to both the project with and without the District Utilities System Option, unless expressly stated otherwise.

- **Project Impacts** – This subsection summarizes the impact conclusions from the Precise Plan EIR and discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact AIR-1 answers the first checklist question in the Air Quality section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM AIR-1.3 refers to the third mitigation measure for the first impact in the Air Quality section.

- **Cumulative Impacts** – This subsection discusses the project's cumulative air quality impacts. "Cumulative impacts," as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant, effects taking place over a period of time. CEQA Guideline Section 15130 states an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

  The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130[b]). To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document (CEQA Guidelines Section 15130[b][1]). For cumulative air quality impacts, a list of past, present and future projects was used to assess the potential for new cumulative impacts and the project's contribution to existing cumulative air quality impacts.

  The analysis must determine whether the project's contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3). The cumulative impacts discussion for each environmental issue accordingly addresses the following issues: 1) would the effects of all of past, present, and probable future (pending) development result in a significant cumulative impact on the resource in question; and, if that cumulative impact is likely to be significant, 2) would the contribution from the proposed project to that significant cumulative impact be cumulatively considerable.

The impact discussions for all other environmental resources are included in Section 5.0 Previously Identified Effects, because no new or substantially more severe impacts associated with those environmental resources were identified beyond those previously analyzed in the Precise Plan EIR.

4.1 AIR QUALITY

The following discussion is based, in part, on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. This report is attached as Appendix C.

4.1.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for air quality has not substantially changed since the certification of the Precise Plan EIR.

4.1.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed based on six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[22] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health effects are summarized in Table 4.1-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.1-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

[22] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$).

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or in the deepest regions of the lungs (most susceptible to injury).[23] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.1.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead. The national ambient air quality standards (NAAQS or "national standards") are classified as either primary or secondary. Primary standards are meant to provide public health protection, including protecting the health of

[23] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed August 19, 2021. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. California has adopted its own air quality standards, known as the California ambient air quality standards (CAAQS or "state standards"). California's ambient standards are at least as protective as the NAAQS and often more stringent. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel-fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[24]

[24] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

CEQA Air Quality Guidelines

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

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to air quality. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 20.5	**Truck access.** Plan industrial and commercial development to avoid truck access through residential areas and minimize truck travel on streets designated primarily for residential access by the General Plan.
NC 20.6	**Air quality standards.** Protect the public and construction workers from construction exhaust and particulate emissions.
INC 20.7	**Protect sensitive receptors.** Protect the public from substantial pollutant concentrations.
INC 20.8	**Offensive odors.** Protect residents from offensive odors.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. P. 137

East Whisman Precise Plan

The Precise Plan contains guiding principles, guidelines, and design standards that relate to air quality by encouraging increased density and a mix of uses near transit stations, improved pedestrian and bicycle facilities, and aggressive vehicle trip reductions for new and existing office development that also reduce air pollutant emissions by reducing vehicle miles traveled.

4.1.1.3 *Existing Conditions*

The project site is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. The Bay Area, as a whole, does not meet state or federal ambient air quality standards for ground level O_3, and $PM_{2.5}$, nor does it meet state standards for PM_{10}. The Bay Area is considered in attainment or unclassified for all other pollutants.[25]

The nearest sensitive receptors to the project site are residences located approximately 700 feet southwest of the site in the P-37 South Whisman Precise Plan area. There are also residences located approximately 1,000 feet southeast, to the east of SR 237 from the project site in the City of Sunnyvale

[25] "Attainment" status for a pollutant means a given air district meets the standard set by the EPA and/or CARB.

(refer to Figure 3.2-3). The future residents of the recently approved 400 Logue Avenue Residential project, adjacent to the project site, would be considered sensitive receptors when that development is occupied.[26] It is anticipated that the planned residences at 400 Logue would be occupied by late 2024.[27] Additionally, future residents would be located in the approved 355 East Middlefield Road Residential project approximately 650 feet southwest of the project site.[28]

4.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on air quality, would the project:

1) Conflict with or obstruct implementation of the applicable air quality plan?
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
3) Expose sensitive receptors to substantial pollutant concentrations?
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgement on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Mountain View has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.1-2 below.

Table 4.1-2: BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Annual Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	40
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	

[26] The 400 Logue Residential project (PL-2019-406) was approved by the Mountain View City Council on June 22, 2021.
[27] City of Mountain View. *400 Logue Avenue Residential Project Consistency Checklist.* May 2021.
[28] The 355, 364, 401, 415 E. Middlefield Residential Project (PL-2018-206) was approved by the Mountain View City Council on October 13, 2020.

Table 4.1-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Annual Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	100 per million	
Incremental Annual $PM_{2.5}$	0.3µg*/m_3	0.8 µg/m_3 (average)	
Note: µg = micrograms			

4.1.2.1 *Project Impacts*

Impact AQ-1: **Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

The Precise Plan EIR concluded the Precise Plan would not conflict with 2017 CAP or interfere with its implementation because the plan includes implementing policies and measures consistent with the 2017 CAP and would not increase vehicle-miles traveled (VMT) at a rate faster than population growth.[29] The project is consistent with the Precise Plan.

The BAAQMD CEQA Air Quality Guidelines set forth separate criteria for determining project-level consistency with the 2017 CAP. In general, a project is considered consistent with the 2017 CAP if the project:

a) Supports the primary goals of the 2017 CAP;
b) Includes relevant control measures; and
c) Does not interfere with implementation of the 2017 CAP control measures.

The project's consistency with the 2017 CAP based on the above criteria is discussed below.

Support of Primary 2017 CAP Goals

As discussed in Section 4.1.1.2 Regulatory Framework, the goals of the 2017 CAP include 1) protecting public health by progressing towards attaining air quality standards and eliminating health risk and 2) protecting the climate. If a project exceeds the BAAQMD thresholds of significance, its emissions are considered to result in significant adverse air quality impacts to the region's existing air

[29] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 46-49.

quality conditions. Similarly, if the project exceeds the BAAQMD community health risk threshold of significance, the project would result in a community health risk. A project exceeding either of these BAAQMD thresholds is considered to be inconsistent with the 2017 CAP, even if the project meets the CAP goals. An analysis of the project's construction and operational air pollutant emissions is provided below, as well as a discussion of the project's community health risk.

Construction Period Emissions

The Precise Plan EIR disclosed that future development under the Precise Plan would result in short-term emissions from construction activities.[30] During construction, fugitive dust (the dominant source of PM_{10} and $PM_{2.5}$ emissions) is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those in the vicinity. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_x emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

Fugitive Dust

The Precise Plan EIR concluded the construction of future development projects under the Precise Plan would result in less than significant impacts from fugitive dust with the implementation of the below BAAQMD best management practices, which the City requires as a standard condition of approval (Impact AQ-2 in the Precise Plan EIR).[31]

Standard Condition of Approval

COA AQ-1.1: Both Project Options: Basic Air Quality Construction Measures. The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate, such as:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

[30] City of Mountain View. *East Whisman Precise Plan, Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 49.
[31] Ibid. Pp. 49-50.

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of Mountain View regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations

The project (under either option) would implement the above standard condition of approval and, therefore, result in the same less than significant impact for construction fugitive dust as disclosed in the Precise Plan EIR.

Criteria Air Pollutants

The Precise Plan EIR concluded construction of future projects under the Precise Plan could exceed BAAQMD thresholds for criteria pollutants and result in a significant impact (Impact AQ-3 in the Precise Plan EIR).[32] The Precise Plan EIR identified mitigation measure MM AQ-3.1 to reduce the impact to a less than significant level.

East Whisman Precise Plan EIR Mitigation Measure

Precise Plan EIR MM AQ-3.1: Both Project Options: Construction criteria pollutant and TAC quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through the following measures:

- Construction equipment selection for low emissions;
- Use of alternative fuels, engine retrofits, and added exhaust devices;
- Low Volatile Organic Compounds (VOC) paints;
- Modification of construction schedule; and
- Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust.

[32] Ibid. Pp 50.

Consistent with Precise Plan EIR MM AQ-3.1, a project-specific air quality analysis was prepared (refer to Appendix C). The following discussion summarizes the findings and conclusions of this project-specific air quality analysis.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 and CARB's Emission Factor 2021 (EMFAC2021) model were used to estimate annual emissions from construction activities. Construction emissions were modeled based on equipment list and schedule information provided by the applicant for the project with District Utilities System Option. The construction schedule assumes the project (under either option) would be built over a period of approximately 8.5 years, or an estimated 2,652 construction workdays. Details about the equipment list, construction schedule, modeling, data inputs, and assumptions are included in Appendix C. Table 4.1-3 shows the estimated daily air emissions from construction of the project with District Utilities System Option. The emissions for the project without the district utilities system are less than shown in Table 4.1-3 since all aspects of the two project options are the same except the option with district utilities system, which includes additional construction of the CUP, district heating and cooling system, and district distribution system.

Table 4.1-3: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day)

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2022-2023 (366 construction workdays)	7.85	**66.67**	3.42	2.94
2024 (314 workdays)	3.33	24.37	1.42	0.99
2025 (313 workdays)	45.56	54.17	2.55	2.08
2026 (313 workdays)	13.53	**112.61**	5.43	4.45
2027 (313 workdays)	17.16	**71.98**	3.78	2.81
2028 (314 workdays)	**82.76**	47.15	2.76	1.85
2029 (313 workdays)	5.22	22.64	1.51	0.83
2030 (313 workdays)	1.34	8.25	0.49	0.22
2031 (93 workdays)	1.25	7.86	0.46	0.21
BAAQMD Thresholds	*54*	*54*	*82*	*54*
Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above, the emissions would be similar and exceed the BAAQMD thresholds of significance for ROG and NO_x. Assumes 2,652 construction workdays.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-3 above, project construction would exceed BAAQMD significance thresholds for ROG in construction year 2028 and for NO_x emissions in construction years 2022-2023, 2026, and

2027. Pursuant to Precise Plan EIR mitigation measure MM AQ-3.1, the project (under either option) would implement the below new project mitigation measure to reduce its construction criteria air pollutant emissions of ROG and NO_x to a less than significant level.

New Project Mitigation Measure:

MM AQ-1.1: Both Project Options: Pursuant to Precise Plan EIR MM AQ-3.1, the project (under either option) shall implement the following measures during all phases of construction:

- All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NO_x and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise:
    - If use of Tier 4 Final equipment is not commercially available, the project applicant shall use alternative equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85-percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination). The project applicant shall provide to the City for review and approval documentation showing that engines that comply with Tier 4 Final off-road emission standards are not commercially available for the specific off-road equipment necessary during construction. For purposes of this mitigation measure, "commercially available" shall take into consideration the following factors: (i) potential significant delays to critical-path timing of construction and (ii) the geographic proximity to the project site of Tier 4 Final equipment.
    - Use of alternatively fueled equipment with lower NO_x emissions compared to traditional diesel fuel equipment that meets or exceeds the NO_x and PM reduction requirements of U.S. EPA Tier 4 Final engine emission standards, as required above.
- Use electric equipment such as aerial lifts, air compressors, cement mortar mixers, concrete/industrial saws, cranes, and welders. Portable equipment shall be powered by grid electricity or alternative fuels (i.e., not diesel) instead of by diesel generators.
- Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than two minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit.
- Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.
- Use low VOC coatings to reduce ROG emissions during construction. The project shall use low VOC coatings that are below current BAAQMD requirements (i.e., Regulation 8, Rule 3: Architectural Coatings), for at least 80

percent of all residential and nonresidential interior paint and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 80 percent of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low VOC coatings to be used. Examples of "super-compliance" coatings are contained in the South Coast Air Quality Management District's website.[33]

With implementation of the above mitigation measure, modeling indicates that on-site construction ROG emissions would be reduced by 70 percent and NO_x emissions would be reduced by 62 percent, resulting in less than significant impacts for each criteria pollutant as shown on Table 4.1-4. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation Incorporated)]**

Table 4.1-4: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day) with MM AQ-1.1

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2022-2023 (366 construction workdays)	2.94	15.95	0.76	0.43
2024 (314 workdays)	2.04	10.89	0.71	0.32
2025 (313 workdays)	10.54	16.08	0.78	0.43
2026 (313 workdays)	5.81	31.59	1.60	0.86
2027 (313 workdays)	6.53	25.74	1.66	0.79
2028 (314 workdays)	19.39	21.49	1.52	0.67
2029 (313 workdays)	3.31	15.07	1.15	0.48
2030 (313 workdays)	1.09	6.24	0.46	0.19
2031 (93 workdays)	1.01	5.93	0.43	0.18
BAAQMD Thresholds	*54*	*54*	*82*	*54*
Exceed Thresholds?	**No**	**No**	**No**	**No**

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above, the emissions would be similar and exceed the BAAQMD thresholds of significance for ROG and NO_x. Assumes 2,652 construction workdays.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

[33] South Coast Air Quality Management District. "Super-Compliant Architectural Coatings." Accessed December 20, 2021. http://www.aqmd.gov/home/rules-compliance/compliance/vocs/architectural-coatings/super-compliant-coatings

Operational Period Emissions

The Precise Plan EIR disclosed the implementation of the Precise Plan would result in long-term pollutant emissions from building operations (including operation of stationary sources like emergency backup diesel generators) and vehicle use.[34] The BAAQMD CEQA Air Quality Guidelines do not have numeric thresholds related to direct and indirect regional criterial air pollutant emissions resulting from plan implementation; rather, BAAQMD only requires emission computations for project-level analysis. For this reason, the Precise Plan EIR stated future projects under the Precise Plan would be reviewed against BAAQMD operational criteria pollutant thresholds when proposed.

A project is now proposed; therefore, the operational emissions of the project were modeled and compared to BAAQMD thresholds. Operational criteria pollutant emissions associated with the project (under either option) would be generated primarily from vehicles driven by future employees, residents, customers, and vendors to and from the project site and from consumer products. The project (under either option) proposes 11 emergency diesel generators (including seven 500 kW generators for the residential buildings and four 900 kW generators for the office buildings). The generators would be tested periodically and would power the buildings in the event of a power failure. It is assumed the generators would operate primarily for testing and maintenance purposes.

CalEEMod and EMFAC2021 were used to estimate emissions from the project with district utilities system operation assuming full build out of the proposed MPMP. The estimated net annual and daily operational period emissions from the project with District Utilities System Option compared to BAAQMD thresholds of significance are summarized in Table 4.1-5. Existing uses on the project site currently generate operational emissions. These emissions are estimated based on the earliest possible date in which they could cease operations and subtracted from the project's emissions at the earliest date in which the project (under either option) would be constructed and operational (2032) to arrive at the project's net emissions. Any emissions associated with build out later than 2032 would be lower than current emissions due to assumed efficiencies from improved vehicle fuel efficiency, energy efficient appliances, and mechanical systems over time. The emissions for the project without the district utilities system are less than shown in Table 4.1-5 for NO_x, $PM_{2.5}$ and PM_{10} emissions since all aspects of the two project options are the same except the option with district utilities system, which includes the operation of the CUP, district heating and cooling system, and district distribution system. ROG emissions would be the same as shown in Table 4.1-5 because the addition of the CUP in the district utility system would not result in greater ROG emissions since ROG emissions are primarily from area and mobile sources. The modeling assumptions, data inputs, and results are described further in Appendix C of this EIR.

[34] Ibid. P. 51.

Table 4.1-5: Project with District Utilities System Option Operational Period Emissions				
Scenario	**ROG**	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
Tons Per Year				
2032 Project Emissions	19.47	9.37	8.44	2.84
2021 Existing Use Emissions	(6.57)	(3.43)	(1.89)	(0.53)
Net Annual Emissions	**12.90**	1.47	4.58	1.70
BAAQMD Thresholds	*10*	*10*	*15*	*10*
Exceed Threshold?	**Yes**	No	No	No
Pounds Per Day				
2032 Daily Project Operational Emissions*	**70.69**	8.03	25.11	9.29
BAAQMD Threshold	*54*	*54*	*82*	*54*
Exceed Threshold?	**Yes**	No	No	No

Note: *Assumes 365-day operations, **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the operation of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above for NO_x PM_{10}, and $PM_{2.5}$ and the same as shown above, for ROG emissions. Thus, ROG emissions for the project (under either option) would still exceed the BAAQMD thresholds of significance for ROG.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-5 above, operational criteria pollutant emissions associated with the proposed project (under either option) would exceed BAAQMD significance thresholds for ROG. The greatest sources for operational ROG emissions are area emissions (e.g., architectural coatings and consumer product use), which represent 64 percent of total ROG emissions, and mobile emissions, which represent 36 percent of total ROG emissions. This is a new impact that was not previously disclosed in the Precise Plan EIR.

To reduce the impact from area ROG emissions from architectural coatings, the project would be required to use super compliant VOC coatings pursuant to MM AQ-1.1 above and pursuant to the Precise Plan EIR MM AQ-3.1. While it is feasible and enforceable for the City to require super compliant VOC coatings be applied initially, the City cannot ensure that future occupants or tenants would use super compliant VOC coatings during reapplication for the lifetime of the project. In addition, there is no feasible mitigation measure to ensure consumer products (such as inks, coatings, and adhesives) used by future residents and tenants would be low in VOCs. The project's mobile ROG emissions from office, commercial, and residential uses would be reduced to the maximum extent feasible through the TDM measures proposed by the project and required per the Precise Plan as described in Section 3.2.9 Transportation Demand Management.[35] The reduction in mobile ROG

[35] As discussed in Appendix H, the project's VMT is consistent with the assumptions in the Precise Plan EIR. Per City direction and in accordance with Precise Plan policies, a 46 percent VMT reductions for office uses resulting from

emissions is already reflected in the project emissions in Table 4.1-5. For these reasons, operational ROG emissions from the project (under either option) are conservatively assumed to be significant and unavoidable. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Health Effects Associated with Significant Operational ROG Emissions

Emissions of ROG (as well as NO_x) from individual sources (such as the project under either option) throughout the Bay Area contribute to high O_3 levels in the region and as stated in Section 4.1.1.3 Existing Conditions, the project region is in nonattainment for O_3. O_3 is an oxidant that is harmful to public health at high concentrations. O_3, at high levels, can damage the tissues of the lungs and respiratory tract. High concentrations of O_3 irritate the nose, throat, and respiratory system and constrict the airways. O_3 also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high O_3 levels can make people more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. O_3 can also have negative cardiovascular impacts, including chronic hardening of the arteries and trigger heart attacks. Children are most at risk, as they tend to be active and outdoors in the summer, when O_3 levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to O_3's effects. Healthy adults working or exercising outdoors during high O_3 levels can be affected.

Because emissions in one part of the region can impact air quality miles downwind, efforts to reduce O_3 levels focus on reducing emissions of ROG and NO_x throughout the region. The relationship between ROG and NO_x in O_3 formation is complex; the ratio between the precursor pollutants influences how O_3 forms. Modeling suggests that large reductions in ROG and NO_x emissions will be needed to achieve the O_3 reductions required to attain the current health-based ozone standards. A certain amount of O_3 formation occurs naturally, even in the absence of anthropogenic emissions of ROG and NO_x.

CARB reports statistics for O_3 monitoring in the San Francisco Bay Area. Over the last three years in San José,[36] maximum one-hour average O_3 levels are 0.106 parts per million (ppm).[37] Eight-hour maximum O_3 levels over this same period were 0.085 ppm. Both levels exceed the ambient air quality standards of 0.09 ppm for the one-hour standard and 0.070 ppm for the eight-hour period. For measuring compliance with the O_3 NAAQS, CARB reports a 2020 Design Value of 0.060 ppm for the 8-hour standard and 0.086 ppm for the 1-hour standard, which are both below the NAAQS. Throughout the Bay Area, the eight-hour standard was exceeded somewhere within the Air Basin on six days in 2018, nine days in 2019, and nine days in 2020. The eight-hour design value for the standard is reported by CARB as 0.069 ppm. The less restrictive one-hour standard was exceeded on two to six days per year and a state standard designation of 0.10 ppm was assigned to the basin.[38]

implementation of the proposed TDM program were accounted for in Trip Cap Requirement. An additional nine and 30 percent VMT reductions for residential and commercial uses, respectively, were accounted for in transit and pass-by reductions. See Appendix H for further details.

[36] San Jose station is the closes monitoring station to the project site. Source: BAAQMD. *2021 Air Monitoring Network Plan.* July 1, 2021. Page 17. https://www.baaqmd.gov/~/media/files/technical-services/2020-network-plan-draft-202100526-pdf.pdf?la=en

[37] California Air Resources Board. "iADAM Air Quality Data Statistics (2018-2020), Top 4 Summary: Select Pollutant, Years, & Area." Accessed April 20, 2022. https://www.arb.ca.gov/adam/topfour/topfour1.php

[38] 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

No development 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 and, while its emissions may be individually limited, it could be cumulatively considerable when taken in combination with past, present, and future development projects.[39] The thresholds for criteria air pollutants are based on levels at 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, if a project leads to a significant impact individually, the project would also be considered to contribute significantly to the cumulative impact.

A project-level air quality analysis of criteria air pollutants is based on significance thresholds that were set at emission levels tied to the region's attainment status.[40] Locally, the significance thresholds applied in this EIR are emission levels above which stationary air pollutant sources permitted by the BAAQMD (typically, industrial facilities, refineries, and the like) must offset their emissions through purchase of emissions "offsets" from other facilities that have reduced emissions, either through installation of emissions controls or removal of an emissions source. Such offset levels allow for regional development while keeping the cumulative effects of new sources at a level that will not impede attainment of the NAAQS. Therefore, a CEQA air quality analysis of criteria air pollutants is essentially an analysis of regional, cumulative air quality impacts and a given project's contribution to those impacts.

The ambient air quality standards are expressed in terms of the concentrations of individual pollutants within the air. Compliance with the ambient air quality standards indicates that regional air quality can be considered protective of public health, with certain exceptions, it is not readily feasible to calculate an individual project's effect on ambient O_3 concentrations given current environmental science modeling tools. Some pollutants are directly emitted from projects and their effects on ambient air quality can be modeled. An example is carbon monoxide, or CO, which is emitted directly as vehicle exhaust.

O_3, however, is a regional pollutant for which project-specific concentration modeling is not reliable given current air quality modeling limitations. Because of the complexity of ozone formation and given the state of modeling available, it is infeasible to reliably convert specific mass emissions levels (i.e., weight) of NO_X or ROG emitted in a particular area (or by a particular project) to a particular concentration of ozone in that area in a manner that yields meaningful results.[41] Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone.[42,43] Furthermore, available models are designed to determine regional, population-wide health impacts and cannot accurately quantify ozone-related

[39] Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines, May 2017*. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.
[40] San Joaquin Valley Air Protection Control District. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.
[41] Ibid.
[42] South Coast Air Quality Management District. Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno. 2014
[43] Ibid.

health impacts caused by NO_X or ROG emissions at the local level or individual project level. Consequently, there is not a reliable way to connect the proposed project's exceedances of ROG emissions to increases in ozone concentrations and, thus, meaningfully determine specific human health impacts related to those increases in ozone concentrations.

Project-level mass (weight) emission thresholds have been established for ozone precursors (NO_X and ROG) and other criteria pollutants precisely because it is not possible to readily convert mass emissions at the project-level to pollutant concentrations. As explained by BAAQMD, the CEQA significance thresholds established for the ozone precursors ROG and NOx were tied to BAAQMD's offset requirements for ozone precursors based on the Bay Area being in non-attainment with the federal ozone standard; this approach is considered appropriate "to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment)."[44] Therefore, attainment can be considered protective of public health, thus providing a strong link between a mass emission threshold and avoidance of health effects. For PM_{10} and $PM_{2.5}$, BAAQMD established CEQA significance thresholds based on the federal New Source Review program for new stationary sources of pollution, which contains stricter thresholds than does BAAQMD's offset program for these pollutants. "These thresholds represent the emission levels above which a project's individual emissions would result in a considerable adverse contribution to the [San Francisco Bay Area Air Basin]'s existing air quality conditions."[45] As with ROG and NO_X discussed above, these thresholds likewise provide a connection between a mass emission threshold and avoidance of health effects.

Nevertheless, the proposed project's ROG emissions that exceed significance thresholds are evaluated to determine whether these emissions would contribute to new or exacerbated air quality violations in the air basin by contributing to more days of ozone exceedance or result in air quality index values that are unhealthy for sensitive groups and other populations. Although the project would exceed the ROG thresholds even after mitigation, the exceedance is minor at 12.9 tons per year versus the threshold of 10 tons per year. To evaluate the project's effects on O_3 levels in the region, the project's operational ROG emissions were compared to regional emissions that lead to elevated concentrations of O_3 (refer to Table 4.1-6 below).

Table 4.1-6: Comparison of Project Emissions to Air Basin ROG Emissions (tons/day)

Bay Area Air Basin ROG Emissions in 2020	203
Bay Area Air Basin ROG Emissions in 2030[1]	200
Project Operational Emissions in 2032[1]	0.03[2]

[1] Closest year of analysis to project operational year of 2032 under either option

[2] Converted from 12.90 tons per year

Sources: 1) Bay Area Air Quality Management District. *Spare the Air Cool the Climate Final 2017 Clean Air Plan.* April 2017. and 2) Illingworth & Rodkin, Inc. *Air Quality Analysis for Middlefield Park Master Plan. Mountain View, California.* April 19, 2022.

[44] Bay Area Air Quality Management District. *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October 2009*. Accessed April 20, 2022. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en.

[45] *Ibid*.

As shown from the data in Table 4.1-5, operational emissions from the project (under either option) in 2032 (the soonest year the project would be fully operational) exceed the single-source threshold of 10 tons per year by 2.9 tons per year. As shown in Table 4.1-6, the project's total emissions represent 0.02 percent of the regional inventory.[46] This is a conservative estimate because the estimated emissions do not reflect the reduction in emissions from future occupants or tenants using super compliant VOC coatings during reapplication for the lifetime of the project (see last bullet in mitigation measure (MM AQ-1.1 above). Therefore, although the project may increase O_3 levels, the increase will be minimal given the scale of the project's ozone precursor emissions, and the health impacts caused by the project's ROG emissions (under either option) are also likely minimal. Further, given available modeling tools, it is not possible to accurately delineate a direct link between the project's O_3 precursor emissions and health effects predicted for the region by BAAQMD resulting from elevated O_3 levels caused by the project.

To further convey the potential community-wide health impacts from the project's ROG emissions exceeding the BAAQMD threshold, a comparative example from another project EIR in the South Bay is provided. The Downtown West Mixed-Use master plan development with up to 7.3 million square feet of office uses, 5,900 residential units, 500,000 square feet of commercial uses, 300 hotel rooms, 800 rooms of limited term corporate accommodations, 100,000 square feet of event/conference space, a 130,000 square foot CUP, 100,000 square feet of logistics center uses, 15 acres of parkland/open space, and transportation and parking improvements is estimated to result in a total of 69 tons per year of net new construction and operational ROG emissions in 2032 (the soonest year the project would be fully operational).[47] In terms of geographical context, the proposed project is within 10 miles of the Downtown West Mixed-Use Plan project in a location with similar dispersion conditions that are characteristic of the southern Bay Area. The Downtown West Mixed-Use Plan project would generate five times more ROG emissions than the project (under either option) evaluated in this EIR. That EIR attempted to model the health effects from ROG emissions and found approximately 0.03 additional respiratory-related hospital admissions, 0.05 additional mortalities, and less than 0.36 additional asthma-related emergency room visits in the region could be attributed to project-related increases in ambient air concentrations.[48] Due to this nominal increase in incidence of health effects from the increase in emissions from the Downtown West Mixed-Use Plan project, the Downtown West Mixed-Use Plan EIR concluded that project would have a very small impact on community-wide health effects.[49]

The proposed project with District Utilities System Option in this EIR includes approximately 17 percent of the office uses, 32 percent of the residential uses, six percent of the commercial/retail uses, 66 percent of the parks/open space uses, 34 percent of the CUP space, and none of the hotel, corporate accommodations, entertainment, or logistics uses included in the Downtown West Mixed-Use Plan project. Therefore, the proposed project (under either option) operational emissions would result in lesser health effects than the health effects disclosed for the Downtown West Mixed-Use Plan project.

Based on the discussion above, the project (under either option) would not cause measurable increases to regional (ozone) air pollutant levels or health effects associated with the project's ROG emissions

[46] 0.03 tons per day (project emissions) / 200 tons per day (air basin emissions in 2030) = 0.00015 or 0.02 percent
[47] City of San José. *Downtown West Mixed-Use Plan, Draft Environmental Impact Report* (SCH# 2019080493). October 2020. P. 3.1-114.
[48] Ibid. P. 3.1-117.
[49] Ibid. P. 3.1-120.

to materially change. The emissions of ROG are, however, considered significant and unavoidable.

Community Health Risk

Project impacts related to increased community risk can occur by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or, as discussed in Section 4.1.2.2 Cumulative Impacts, by significantly exacerbating existing cumulative TAC impacts. The project (under either option) would introduce new sources of TACs during construction and operation.

As noted in Section 3.2 Project Description, the project (under either option) would be constructed over approximately 8.5 years in four overlapping phases. For this reason, the health risk impacts of overlapping project construction and operational emissions are analyzed to represent air quality impacts during earlier phases of construction and during phases of construction when some buildings would be occupied while others are being constructed. The operational emissions are also analyzed separately to represent health risk from the project after construction has been completed.

The Precise Plan EIR concluded that the health risks would be mitigated to less than significant levels with the implementation of the City's standard conditions of approval for fugitive dust and Precise Plan EIR MM AQ-3.1, both of which are listed above.[50]

Overlapping Project Construction and Operation Emissions

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC, and would pose a health risk to nearby receptors. The primary health risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. The greatest TAC of concern generated during construction that could lead to cancer risk is DPM, which is used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole.

The project (under either option) would include operation of stand-by generators powered by diesel engines and cooling towers and would generate traffic consisting of light-duty vehicles, all of which would produce TAC and criteria air pollutant emissions during project operations. Operational emissions of DPM, TACs, $PM_{2.5}$ and PM_{10} from project-generated traffic on local roadways and operation of the proposed emergency generators were modeled using the U.S. EPA AERMOD dispersion model. The cooling towers are not powered by a diesel engine; therefore, no DPM emissions would be produced from operation of the cooling towers.

Pursuant to Precise Plan EIR MM AQ-3, a project-specific TAC/health risk quantification was completed (refer to Appendix C). The following discussion summarizes the findings and conclusions of the health risk assessment. The assessment evaluated potential health effects to nearby receptors (within 1,000 feet of the project site) from overlapping construction and operational emissions of DPM and $PM_{2.5}$. For purposes of this analysis, receptors are locations where sensitive populations would be present for extended periods of time including the existing residences to the southwest on East Middlefield Road, and to the south on Infinity Way (in South Whisman Precise Plan area), as well as

[50] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 52.

future residences adjacent to the site at 400 Logue Avenue and southwest of the site at 355 E. Middlefield Road.[51] A health risk assessment of future residents on the project site is included in Section 4.1.3.

Consistent with the BAAQMD CEQA Air Quality Guidelines, the CalEEMod, U.S. EPA AERMOD, and EMFAC2017 models were used to calculate health risk from the project with District Utilities System Option construction and operational activities (refer to Appendix C for details about model and modeling assumptions). Community health risk impacts are addressed by predicting increased cancer risk, annual $PM_{2.5}$ concentrations, and Hazard Index (HI) for non-cancer-health risks. The maximum modeled annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors to find the maximally exposed individual (MEI), or the sensitive receptor that is most impacted by the project's overlapping construction and operational TAC emissions. Results of this assessment indicated that there are two MEIs located in two different units of the approved 400 Logue Avenue Residential project. Figure 4.1-1 shows the location of off-site receptors, including the MEIs and modeled project traffic. The $PM_{2.5}$ concentration MEI is located at a receptor on the first floor and the cancer risk MEI is located at a receptor on the second floor. The estimated cancer risks and annual $PM_{2.5}$ concentrations due to construction and operation of the project with District Utilities System Option are summarized in Table 4.1-7 below.

The unmitigated cancer risk and annual $PM_{2.5}$ concentration from overlapping construction and operation of the project without the district utilities system are less than shown in Table 4.1-7 since all aspects of the two project options are the same except the option with district utilities system, which includes the construction and operation of the CUP, district heating and cooling system, and district distribution system. While the unmitigated cancer risk and annual $PM_{2.5}$ concentrations of the project without the district utilities system would be less than shown in Table 4.1-7, the unmitigated cancer risk and annual $PM_{2.5}$ concentrations would be similar and still exceed the BAAQMD thresholds of significance.

[51] The existing Mountain View Korean SDA Church at 815 Maude Avenue is not considered a site with a sensitive population as visitors/patrons are not at the location for extended periods of time, such as overnight, nor is there a day care center.

Source: Illingworth & Rodkin, Inc., December 23, 2021.

LOCATIONS OF OFF-SITE SENSITIVE RECEPTORS AND MODELED PROJECT TRAFFIC | FIGURE 4.1-1

Table 4.1-7: Project with District Utilities System Option Construction and Operational Community Risk Impacts at the Off-Site Receptors			
Source	**Maximum Excess Cancer Risk (per million)[1]**	**Annual $PM_{2.5}$ ($\mu g/m_3$)**	**Hazard Index**
Project Construction			
Unmitigated	**113.61**	**2.38**	0.09
Mitigated[1]	**14.52**	**0.44**	
Project Operations			
Unmitigated	3.06	0.05	<0.01
Mitigated[1]	3.06	0.05	<0.01
Total Combined Construction and Operational Community Risk			
Unmitigated	**116.67**	**2.43**	0.12
Mitigated	**17.58**	**0.48**	0.12
BAAQMD Single-Source Threshold	*>10.0*	*>0.3*	*1.0*
Exceeds Threshold?			
Unmitigated	**Yes**	**Yes**	No
Mitigated*	**Yes**	**Yes**	No

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The health risk for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction and operation of the CUP, district heating and cooling system, and district distribution system. While the health risk due to the project without the district utilities system would be less than shown above, the emissions would be similar and still exceed the BAAQMD threshold of significance for increased cancer risk.

[1] Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

[2] Mitigated assumes the implementation of the conditions of approval and Precise Plan EIR MM AQ-3.1 for construction emissions. No operational mitigation measures are assumed.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-7, the unmitigated cancer risk and annual $PM_{2.5}$ concentrations from overlapping construction and operation of the project with District Utilities System Option at the MEI location would exceed the single-source thresholds. Implementation of the standard condition of approval (COA AQ-1.1) and the new project mitigation MM AQ-1.1 identified above would reduce the project's off-site cancer risk levels by 85 percent to 16.75 excess cancer cases per million at the MEI. The project's annual $PM_{2.5}$ concentrations would be reduced by 81 percent to 0.44 $\mu g/m^3$ at the MEI. Thus, the project's mitigated risk impacts (under either option) would still exceed the BAAQMD single-source significance thresholds of 10 per million for cancer risk and 0.3 $\mu g/m_3$ for $PM_{2.5}$ concentrations at the MEIs. The modeling shows the cancer risk and annual $PM_{2.5}$ concentrations at all other sensitive receptors would be reduced below the single-source threshold (refer to Appendix C) with the implementation of standard condition of approval and new project mitigation measure MM

AQ-1.1. Since no additional mitigation is feasible to reduce the health risk associated with construction emissions (the primary source of the project's significant health risk impact), the following mitigation is required that would reduce the health risk associated with project operations (the lessor source of the project's significant health risk impact).

New Project Mitigation Measure:

MM AQ-1.2: Both Project Options: All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.

In addition, the City requires the following standard condition of approval to address community health risks from interior finishes containing formaldehyde.

Standard Condition of Approval:

COA AQ-1.2: Both Project Options: Indoor Formaldehyde Reductions. If the project utilizes composite wood materials (e.g., hardwood plywood, medium density fiberboard, particleboard) for interior finishes, then only composite wood materials that are made with CARB approved, no-added formaldehyde (NAF) resins, or ultra-low emitting formaldehyde (ULEF) resins shall be utilized (CARB, Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products, 17 CCR Section 93120, *et seq.*, 2009-2013).

Implementation of MM AQ-1.2, would incrementally reduce emissions from the proposed residential building emergency generators identified in Table 4.1-7, but not to a less than significant level. Thus, the project's mitigated health risk impacts (primarily due to construction emissions) (under either option) would still exceed the BAAQMD single-source significance thresholds of 10 per million for cancer risk and 0.3 $\mu g/m_3$ for $PM_{2.5}$ concentrations at the MEIs.

The above discussed community health risk represents the outdoor air at the sensitive receptor locations. The approved 400 Logue Avenue project would be constructed to meet the current 2019 Title 24 Building Standards, which require air filtration in mechanical ventilation systems for residential buildings use MERV 13 filters or greater. This requirement also applies to the proposed residential buildings (under either option). It is also possible that there would be additional sensitive receptors exposed to similar health risk from project construction and operation (under either option) due to the length of the Development Agreement for the project (under either option)[52] and the fact the Precise Plan envisions additional residential land uses in the project vicinity at distances similar to 400 Logue Avenue to the project site. A properly installed and operated ventilation system with MERV 13 filters achieves an 80-percent reduction of ambient $PM_{2.5}$ concentrations at indoor areas.[53] U.S. EPA

[52] As noted in Section 3.2 Project Description, the proposed project under either option would include a Development Agreement to grant implementation of entitlements over a 20-year period.

[53] Bay Area Air Quality Management District. *Planning Healthy Places A Guidebook for Addressing Local Sources of Air Pollutants in Community Planning.* 2016. Pp. 38. http://www.baaqmd.gov/~/media/files/planning-and-research/planning-healthy-places/php_may20_2016-pdf.pdf?la=en

studies indicate most people spend 90 percent of their time indoors.[54] Assuming exposure to 21 hours of indoor filtered air and three hours of outdoor air, the filtration in the ventilation systems would reduce overall exposure by 70 percent. Taking into account the required MERV 13 filters and their proper installation, operation, and maintenance, as well as the EPA's documented time people spend indoors vs. outdoors, the mitigated cancer risk and annual $PM_{2.5}$ concentrations would be reduced below the significance threshold for sensitive receptors in the 400 Logue Avenue project. This less than significant health risk also assumes residents keep their windows closed during construction of the proposed project (under either option). However, neither the applicant nor the City can feasibly implement, require, or guarantee these assumptions through mitigation measures.

In summary, the project (under either option) would result in exposure of sensitive receptors near or on the project site to health risk impacts (primarily due to construction emissions) exceeding BAAQMD thresholds for cancer cases and annual $PM_{2.5}$ concentrations. Implementation of standard conditions of approval and Precise Plan EIR MM AIR-1.1 identified under Impact AQ-1 would reduce the health risk (primarily due to construction emissions) but not to a less than significant level. Additional reductions could be achieved with properly installed, operated, and maintained ventilation systems and potentially from delayed occupancy of the approved 400 Logue Avenue project[55] and residential buildings planned for early phases of the Project; however, neither the City nor applicant can feasibly implement, require, or guarantee these through mitigation. For these reasons, the health risk impact (primarily due to construction emissions) is conservatively concluded to be significant and unavoidable. This is a new impact not previously disclosed in the Precise Plan EIR. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Project Operations Only

Once construction of the project (under either option) is complete, sensitive receptors would no longer be subject to the health risk from overlapping project construction and operational emissions. As shown in Table 4.1-7, the maximum cancer risk, annual $PM_{2.5}$ concentrations, and HI from operation of the project (under either option) only would not exceed BAAQMD's significance thresholds at the nearby sensitive receptors. Therefore, operation of the project (under either option) would result in the same less than significant health risk impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Consistency with 2017 CAP Control Measures

The 2017 CAP includes control measures to reduce GHG emissions. As shown in Table 4.1-8 below, the project would be consistent with the 2017 CAP measures intended to reduce GHG emission by reducing automobile trips, energy and water usage, and waste.

[54] United States Environmental Protection Agency. "Report on the Environment, Indoor Air Quality, What are the trends in indoor air quality and their effects on human health?" Accessed December 22, 2021. https://www.epa.gov/report-environment/indoor-air-quality

[55] If occupancy of the 400 Logue Avenue Residential project is delayed from 2025 to 2028, health risks would be less than significant because construction of the proposed project would occur farther from this receptor location.

Table 4.1-8: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
Transportation Measures		
Trip Reduction Program	Encourage trip reduction policies and programs in local plans, e.g., general and specific plans. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips.	The project site is proximate to VTA bus and light rail and the Mountain View Transportation Management Association shuttle service. The project (under either option) would include new on-street and off-street bicycle and pedestrian improvements and bicycle parking consistent with City requirements. Additionally, the project (under either option) includes a TDM program (refer to Section 3.2.9 Transportation Demand Management for details) consistent with the Precise Plan TDM requirements to reduce vehicle trips and promote alternative modes of travel to single-occupancy vehicle trips. **Therefore, the project is consistent with this measure.**
Bicycle and Pedestrian Access Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths, and bicycle parking facilities.	As noted above, the project (under either option) would include bicycle parking consistent with the City's bicycle parking requirements. The project area has adequate sidewalks, crosswalks, and pedestrian signal heads and the project proposes five new midblock crossings to further enhance the pedestrian environment. **Therefore, the project is consistent with this measure.**
Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices.	As mentioned above, the project (under either option) would be located in proximity to multiple transit services and would increase the density and diversity of land uses near transit; **therefore, the project is consistent with this measure** (refer to Section 5.16 Transportation for more information).
Building Measures		
Green Buildings	Identify barriers to effective local implementation of CalGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	The project (under either option) would comply with the CalGreen and City's Reach Code requirements, the proposed office buildings would meet the intent of LEED Platinum standards and the proposed residential buildings requesting a Bonus FAR would achieve the equivalent of a GreenPoint rating of 120 points or better, reducing emissions from energy generation and use, and implement a TDM plan to reduce emissions from transportation. **The project (under either option) is consistent with this measure.**
Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities, as well as	No surface parking is proposed for the project (under either option), all parking would be located in parking structures either below-grade, above-grade, or within a building shell. This measure, therefore, is not applicable. The project (under

Table 4.1-8: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
	existing surface parking lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or reroofing/roofing upgrades for commercial and residential multi-family housing.	either option) is consistent with the intent of this measure by planting new landscaping and trees and increasing pervious surfaces on-site compared to existing conditions, which would reduce the urban heat island effect. Hardscape materials would also be chosen and designed to reduce heat island effects. **Therefore, the project is consistent with this measure.**
Natural and Working Lands Measure		
Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District's technical guidance, best management practices for local plans, and CEQA review.	Any trees removed would be required to be replaced in accordance with the City's tree replacement policy. **Therefore, the project (under either option) is consistent with this measure.**
Waste Management Measures		
Recycling and Waste Reduction	Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	The project (under either option) would comply with the City's adopted Zero Waste Plan by providing foodwaste composting facilities for proposed residential and restaurant uses. In addition, the project would comply with the City's Construction and Demolition Diversion Program by recovering or diverting at least 65 percent of construction waste generated by the project from landfills. **Therefore, the project is consistent with this measure.**

In conclusion, the project (under either option) would not conflict with or obstruct implementation of the 2017 CAP control measures and goals; however, the project is found to be inconsistent with the 2017 CAP based on the project exceeding BAAQMD thresholds for health risk and ROG emissions. Specifically, the project (under either option) results in significant, unavoidable operational criteria air pollutant (ROG emissions) and health risk impacts (primarily due to construction emissions). The significant, unavoidable impacts regarding operational ROG emissions and health risk impacts (primarily due to construction emissions) are new impacts not previously disclosed in the Precise Plan EIR. **(New Impact [Significant Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-2:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

As discussed in Section 4.1.1 Environmental Setting, the Bay Area does not meet state and/or federal ambient air quality standards for ground level O_3, $PM_{2.5,}$ or $PM_{10.}$ High O_3 levels are caused by cumulative emissions of ROG and NO_x. Controlling the emissions of these precursor pollutants would reduce O_3 levels.

Construction Period Emissions

As discussed in detail under Impact AQ-1 above, construction of the project (under either option) would not exceed BAAQMD thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$ or fugitive dust with incorporation of the standard condition of approval COA AQ-1.1 and new project mitigation measure MM AQ-1.1. Thus, impacts would be less than significant with mitigation incorporated. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Operational Period Emissions

As discussed in detail under Impact AQ-1 above, operational criteria pollutant emissions associated with the proposed project (under either option) would not exceed BAAQMD significance thresholds, with the exception of ROG. While it is feasible and enforceable for the City to require super compliant VOC coatings be applied initially, the City cannot ensure that future occupants or tenants would use super compliant VOC coatings during reapplication for the lifetime of the project. In addition, there is no feasible mitigation measure to ensure consumer products (such as inks, coatings, and adhesives) used by future residents and tenants would be low in VOCs. Therefore, the project's ROG emissions would be significant and unavoidable. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-3:	**Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

As discussed under Impact AQ-1 above, project (under either option) would result in exposure of sensitive receptors near the project site to TAC emissions in excess of BAAQMD risk thresholds for excess cancer cases and annual $PM_{2.5}$ concentrations primarily from construction emissions. Implementation of mitigation measures MM AQ-1.1 and conditions of approval COA AQ-1.1 and COA AQ-1.2 identified under Impact AQ-1 would reduce the health risk but not to a less than significant level, and therefore, the impact is significant and unavoidable. Project operations would not exceed the thresholds for cancer risk, annual $PM_{2.5}$ concentrations, and HI emissions. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-4:	**Project:** The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Same Impact as Approved Project [Less than Significant Impact])**
	Project with District Utilities Systems Option: The project with District Utilities Systems Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(New Impact [Less than Significant Impact with Mitigation Incorporated])**

Project

Construction Odor Impacts

The Precise Plan EIR disclosed that future construction activities in the Precise Plan area could result in odorous emissions from diesel exhaust associated with construction equipment and concluded that due to the temporary nature of the emissions and the highly diffuse nature of diesel exhaust, exposure of sensitive receptors to these emissions would be limited and less than significant.[56] The odors resulting from construction activities (under either option) would be consistent with the assumptions in the Precise Plan EIR. For these reasons, implementation of the project (under either option) would result in same short-term odor impacts as disclosed in the Precise Plan EIR. **(Same impact as Approved Project [Less than Significant Impact])**

Operational Odor Impacts

The Precise Plan EIR concluded that implementation of the Precise Plan would not result in significant odor impacts with compliance of General Plan Policy INC 20.8, which requires the City to review development projects for potential odor impacts. Operation of the project (without district utilities) would involve operations of office, residential, retail, civic/community, and open spaces uses, none of which generate odors resulting in adverse effects on a substantial number of people. For this reason, the project (without district utilities) would result in the same operational odor impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

Construction Odor Impacts

The project with District Utilities System Option, would result in the same construction odor impacts as discussed above for the project option. **(Same impact as Approved Project [Less than Significant Impact])**

[56] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 52-53.

Operational Odor Impacts

The project with District Utilities System Option would be the same as described above for the project except it also includes the operation of a wastewater treatment plant within the CUP in Building O1.

The BAAQMD CEQA Air Quality Guidelines include screening distances for various odor sources to prevent potential land use conflicts. These screening distances identify two miles for wastewater treatment facilities, which is applied to traditional open municipal facilities that have exposed headworks, open-air ponds, and treat large volumes of wastewater. The screening distances would not apply to the proposed wastewater treatment plant as it is proposed to be small, modern, with enclosed systems where exhaust air is treated.[57] Nonetheless, odor issues could occur if there are upset conditions or improper handling of odor-producing solids or wastewater, improper operations, or poor maintenance. The BAAQMD CEQA Air Quality Guidelines state that a significant odor impact would occur if an odor source receives five or more confirmed complaints per year averaged over a three year period.[58]

The wastewater treatment facility would generate odors from many phases of the treatment process including during anaerobic biological activity, which produces most of the hydrogen sulfide and ammonia type odors that are considered objectionable. Odors can be properly controlled through modern design, appropriate chemical and/or biological treatment, proper ventilation, and facility maintenance. The wastewater treatment facility would be designed to be a completely enclosed system within the CUP. As discussed in Section 3.2.2 Utilities, the proposed wastewater equipment would be equipped with modern technology that minimizes the release of odors and would not include any lagoons, exposed sewage/treatment water, or biosolid piles that would emit odors. The wastewater treatment odors would also be regulated by BAAQMD in the event of odor complaints.

Processes that produce hydrogen sulfide and ammonia are the most objectionably odorous. These processes would be enclosed in the CUP and controlled to minimize odors. Odor controls would be designed using the Best Available Control Technology (BACT) and consistent with regulatory requirements. BACT solutions may include, but are not limited to, the following:

- Installing active ventilation (foul air blowers) to odor control units (e.g., carbon absorption, biofiltration, or ammonia scrubbers);
- Housing odorous processes in a ventilated enclosure;
- Wastewater screenings and grit washed, dewatered, and compacted before being stored in enclosed, odor-proof refuse containers;
- Hauling sealed containers of residuals off-site at regular intervals; and
- Injecting ferrous chloride to remove hydrogen sulfide as needed for odor control at specific wastewater treatment processes.

The project would also include regular monitoring of complaints and reporting on the success of odor controls to regulatory agencies. Proposed residences are located as close as 100 feet of the wastewater

[57] For reference, the Palo Alto Regional Water Quality Control Plant, which treats wastewater generated in Mountain View, has a treatment capacity of up to 80 million gallons per day. Treatment of this volume of wastewater requires specialized and large-scale equipment, which are not required or proposed for the project (under either option).
[58] BAAQMD. *California Environmental Quality Act Air Quality Guidelines.* May 2017. P. 7-4.

treatment plant. Given the proposed use and proximity of residences, the wastewater treatment plant has the potential to cause odors and result in odor complaints. This is a new impact that was not previously identified in the Precise Plan EIR.

New Project Mitigation Measures:

MM AQ-4.1: **Project with District Utilities System Option:** The project applicant shall develop and implement an odor control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor control plan shall describe the design elements and best management practices built into the facility, including the following:

- Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility;
- Odor proofing of refuse containers used to store and transport grit and screenings or biosolids; and
- Injection of chemicals to control hydrogen sulfide.

The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues, as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint and corrective actions could include installing specific odor control technologies (e.g., odor control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's Designee) and BAAQMD prior to issuance of building permits for the CUP. In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to less than five per year, the plant shall cease operations. All wastewater generated by the project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility.

MM AQ-4.2: **Project with District Utilities System Option:** Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.

Through implementation of mitigation measures MM AQ-4.1 and MM AQ-4.2 and compliance with BAAQMD regulations, the project with District Utilities System Option would limit the discharge of odorous substances and respond to upset conditions and odor complaints with corrective actions, reducing impacts to a less than significant level. This is a new impact not previously disclosed in the Precise Plan EIR. **(New Impact [Less than Significant Impact with Mitigation Incorporated])**

4.1.2.2 *Cumulative Impacts*

Impact AQ-C:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact. **(New Impact [Less than Significant Cumulative Impact with Mitigation Incorporated])**

The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. Past, present, and future development projects contribute to the region's adverse air quality impacts. By its very nature, air pollution is largely a cumulative impact. In developing thresholds of significance for air pollution, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's air quality conditions.[59] That is, if a project exceeds the BAAQMD significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.[60]

Implementation of the 2017 CAP

As described above under Impact AQ-1, the project (under either option) would be consistent with the 2017 CAP goals, but would result in significant, unavoidable health risks (primarily due to construction emissions) and operational ROG emissions. The project's implementation of standard conditions of approval COA AQ-1.1 and COA AQ-1.2, Precise Plan EIR MM AQ-3.1, and new project mitigation MM AQ-1.1 would reduce these impacts but not to a less than significant level. The project (under either option), therefore, would result in a cumulatively considerable impact to the implementation of the 2017 CAP. **(New Impact [Significant and Unavoidable Impact with Mitigation Incorporated])**

Net Increase in Criteria Pollutants

As discussed under Impact AQ-1, the project (under either option) would not exceed the project-level thresholds for criteria pollutant emissions with the exception of significant, unavoidable ROG emissions during operations. Implementation of project mitigation measure MM AQ-1.1 requiring the use of low VOC exterior finishes pursuant to Precise Plan EIR MM AQ-3.1 would reduce this impact; however, not to a less than significant level. The project (under either option), therefore, would result in a cumulatively considerable criteria pollutant impact. **(New Impact [Significant and Unavoidable Impact with Mitigation Incorporated])**

[59] BAAQMD. California Environmental Quality Act Air Quality Guidelines. May 2017. P. 2-1. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

[60] Ibid.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

The Precise Plan EIR concluded that cumulative exposure of sensitive receptors to substantial pollutant concentrations associated with implementation of the Precise Plan would be less than significant with preparation of project-specific air quality assessments and implementation of standard conditions of approval and project mitigation measures to reduce health risks to future sensitive receptors. A cumulative health risk assessment was conducted for the project with District Utilities System Option that evaluated all substantial sources of TACs affecting sensitive receptors located within 1,000 feet of a project site. These sources included rail lines, freeways or highways, busy surface roads, and stationary sources identified by BAAQMD. Table 4.1-9 below summarizes the cumulative health risk impacts at the project MEIs.

Table 4.1-9: Cumulative Health Risk Impacts at the Off-Site MEI

Source	Maximum Cancer Risk (per million)[1]	$PM_{2.5}$ concentration ($\mu g/m^3$)[2]	Hazard Index[2]
Project			
(unmitigated)	**116.67**	**2.38**	0.09
(mitigated*)	17.58	0.44	0.01
Traffic Sources	1.05	0.07	<0.01
Stationary Sources	4.99	0.01	0.01
Cumulative Total			
(unmitigated)	**122.71**	**2.46**	<0.11
(mitigated*)	23.62	0.52	0.03
BAAQMD Cumulative-Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?			
(unmitigated)	**Yes**	**Yes**	No
(mitigated*)	No	No	No

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds.

* Mitigated assumes the implementation of condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 under Impact AQ-1.[1]

Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-9, the cumulative health risk (specifically excess cancer risk and annual $PM_{2.5}$ concentration) is less than significant with the project's implementation of standard condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and project mitigation measures MM AQ-1.1 and MM AQ-1.2. The Hazard Index is below the cumulative threshold of significance. This is the same impact as identified in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Cumulative Impact with Mitigation Incorporated)]**

Odor

The project would redevelop a site currently developed with light industrial and office uses into a mixed-use neighborhood including office, residential, retail, and civic/community uses, and open space/parks. Except potential odor impacts from operation of the proposed wastewater treatment plant included in the project with District Utilities System Option, the project (under either option) would not result in odor impacts. As discussed under Impact AQ-4 above, implementation of mitigation measures MM AQ-4.1 and MM AQ-4.2 would avoid odor impacts through development and implementation of an odor control plan. There are no other sources of substantial odors in the Precise Plan area that, when combined with the project (under either option), would result in significant cumulative odor impacts. For these reasons, the project (under either option) would not result in significant cumulative odor impacts. **[Same Impact as Approved Project (Less than Significant Cumulative Impact)]**

4.1.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Mountain View requires health risk assessments for new residential developments near sources of air pollution pursuant to General Plan Policies INC 20.6 and INC 20.7.

The same TAC sources identified to evaluate project impacts under Impact AQ-1 above were used to assess on-site health risks. Details about the on-site health risk modeling, data inputs, and assumptions are included in Appendix C. Table 4.1-10 summarizes the results of the health risk assessment for on-site sensitive receptors and shows project construction would pose the highest health risk on-site. However, with the implementation of condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 discussed under Impact AQ-1 above, and when combined with other cumulative sources, the on-site health risks would be below the BAAQMD thresholds.

Table 4.1-10: Impacts from Cumulative TAC Sources at the Project Site

Source	Maximum Cancer Risk (per million)[1]	$PM_{2.5}$ concentration ($\mu g/m^3$)[2]	Hazard Index[2]
Overlapping Project Construction and Operation			
(unmitigated)	**46.80**	<0.67	<0.10
(mitigated*)	8.79	<0.14	<0.01
Cumulative Traffic	1.45	0.02	<0.01
Cumulative Stationary	6.38	0.01	0.01
BAAQMD Single-Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?			
(unmitigated)	**Yes**	**Yes**	No
(mitigated*)	No	No	No

Table 4.1-10: Impacts from Cumulative TAC Sources at the Project Site			
Source	**Maximum Cancer Risk (per million)[1]**	**$PM_{2.5}$ concentration ($\mu g/m^3$)[2]**	**Hazard Index[2]**
Cumulative Total			
(unmitigated)	54.63	<0.72	<0.12
(mitigated*)	16.62	<0.19	<0.03
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?			
(unmitigated)	No	No	No
(mitigated*)	No	No	No

* Mitigated assumes the implementation of the conditions of approval COA AQ-.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 under Impact AQ-1.[1]

Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

4.1.4 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AQ-1:	**Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds.	No	S	Precise Plan EIR MM AQ-3.1 and MM AQ-1.1	SU
AQ-2:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	No	S	Precise Plan EIR MM AQ-3.1 and MM AQ-1.1	SU
AQ-3:	**Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations.	No	S	MM AQ-1.1	SU
AQ-4:	**Project:** The project (under either option) would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
	Project with District Utilities System Option: The project (with District Utilities System Option) would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No	S	MM AQ-4.1 and 4.2	LTS
AQ-C:	**Both Project Options:** The project (under either option) would not result in a cumulatively considerable contribution to a cumulatively significant air quality impact.	No	S	Precise Plan EIR MM AQ-3.1, MM AQ-1.1, and AQ-1.2	LTS
Abbreviations: S-Significant, LTS – Less than Significant, SU – Significant, Unavoidable Impact					

SECTION 5.0 PREVIOUSLY IDENTIFIED EFFECTS

The City of Mountain View as the CEQA Lead Agency has determined that, based on the analysis in this section, the impacts of the proposed project on the following environmental factors were adequately addressed in the Precise Plan EIR and the General Plan EIR.

5.1	Aesthetics	5.10	Land Use and Planning
5.2	Agriculture and Forestry Resources	5.11	Mineral Resources
5.3	Biological Resources	5.12	Noise
5.4	Cultural Resources	5.13	Population and Housing
5.5	Energy	5.14	Public Services
5.6	Geology and Soils	5.15	Recreation
5.7	Greenhouse Gas Emissions	5.16	Transportation
5.8	Hazards and Hazardous Materials	5.17	Tribal Cultural Resources
5.9	Hydrology and Water Quality	5.18	Utilities and Service Systems
		5.19	Wildfire

As discussed in this section, the project would not result in new or substantially more severe impacts for the environmental factors listed above than disclosed in the Precise Plan EIR and General Plan EIR. The following discussion of the above environmental factors includes the same environmental setting and impact discussion subsections as provided in Section 4.0 for air quality. No cumulative impacts subsection is included as the project-level impacts were found to be the same as disclosed in the Precise Plan EIR and General Plan EIR and, therefore, the project's contribution to cumulative impacts is the same as disclosed in the Precise Plan EIR and General Plan EIR. Refer to the Precise Plan EIR for a discussion of cumulative impacts to the above environmental factors.

5.1 AESTHETICS

5.1.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for aesthetics has not substantially changed since the certification of the Precise Plan EIR.

5.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically Vehicle-Miles-Traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. As part of SB 743, in order to encourage infill development and mode shift away from automobile use, a project's parking impacts will no longer be considered a significant impact on the environment and aesthetic impacts will no longer be considered significant impacts on the environment under CEQA if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area.[61]

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

Streets and Highway Code Sections 260 through 263

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

[61] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Public Resources Code Section 21009. Accessed September 3, 2021. https://codes.findlaw.com/ca/public-resources-code/prc-sect-21099.html.

Local

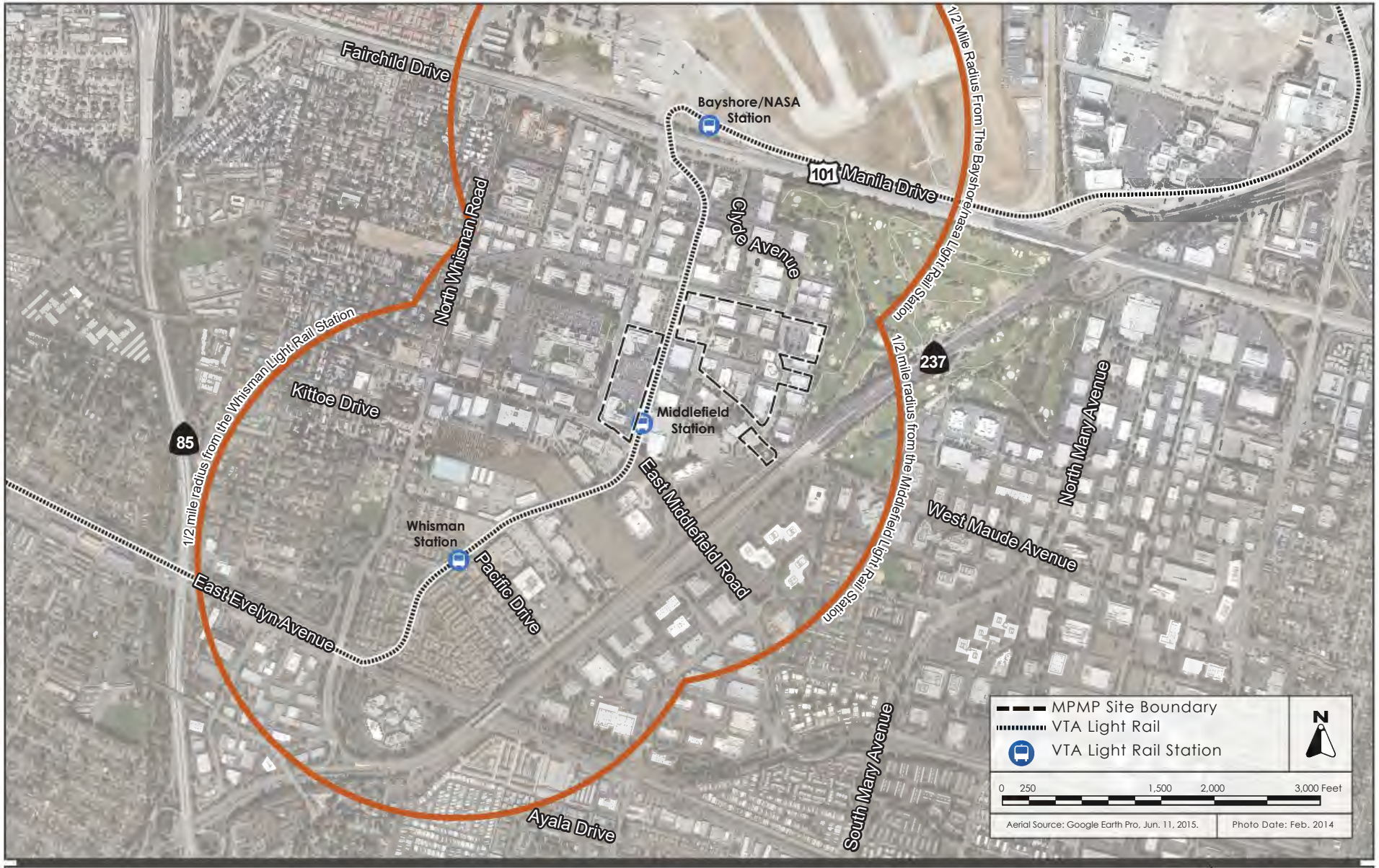
In July 2019, the City of Mountain View Department of Public Works revised the Standard Provisions and Standard Details. The Standard Design Criteria establish parameters for the design, materials, and construction methods for street design, including criteria for street lighting. Additionally, the project is subject to review by the City of Mountain View's Development Review Committee to review project-specific design and aesthetics.

5.1.1.2 *Existing Conditions*

The project site is within a transit priority area, pursuant to SB 743 (see Figure 5.1-1).

The approximately 40-acre project site is located within the larger 412-acre Precise Plan area. As described in Section 3.0 Project Information and shown in Figure 3.2-4, the project site is not all contiguous and is generally bounded by the property of the City and County of San Francisco (often referred to as the SFPUC right-of-way) to the north that consists of paved areas and landscaping, East Middlefield Road (a four-lane roadway) to the south, Ellis Street (a four-lane roadway) to the west, and the Sunnyvale Municipal golf course and SR 237 (a four-lane freeway) to the east.

The project site is currently developed with 23 office and light industrial buildings, ranging from one to four stories in height and totaling approximately 684,645 square feet. The buildings are a mix of older and more contemporary architecture. The older office buildings (built between 1960 and 1990 are lower intensity (one- to two-stories tall) with brick, stucco, or concrete facades. The more contemporary buildings (built between 1990 and the present) are generally taller (up to four stories) with glass expanses, stone facades, and metal details. All the buildings are surrounded by surface parking, and landscaping (primarily consisting of mature trees) is limited to the perimeter of the buildings and within the parking lots. Light rail tracks run north-south dividing the project site into two portions (see Figure 3.2-4). The Middlefield Light Rail Station is located on East Middlefield Road at the midblock between Ellis Street and Logue Avenue. The Middlefield Light Rail Station is a paved at-grade platform station with two shade structures located between the northbound and southbound light rail tracks. The Hetch-Hetchy/TOD Trail, which is a multi-modal paved trail that provides off-street access between Ellis Street and Stevens Creek Trail, is located approximately 65 feet west of the project site, across Ellis Street. Existing sources of light within and adjacent to the project site include streetlights, indoor lighting, and outdoor security lighting, as well as lighting from vehicles traveling on roadways.



TRANSIT PRIORITY AREA | FIGURE 5.1-1

5.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on aesthetics, except as provided in Public Resources Code Section 21099, would the project:

1) Have a substantial adverse effect on a scenic vista?
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?[62] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

5.1.2.1 *Project Impacts*

Impact AES-1:	**Both Project Options:** The project (under either option) would not result in a significant aesthetics impact. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that the implementation of the Precise Plan, including development of the project site, would not result in significant aesthetic impacts.[63] As discussed in the Precise Plan EIR, pursuant to SB 743, "aesthetic and parking impacts of a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment." The proposed project (including the proposed future bicycle/pedestrian bridge overcrossing and future city parks) would meet the criteria of SB 743 because it is a mixed-use residential project located on an infill site within a transit priority area. Additionally, the project includes design objectives for all building designs within the project area, which are consistent with the Precise Plan design guidelines and standards and the project exterior building, site lighting, and street lighting would be designed in accordance with City's Building Code, Public Works' Standard Design Criteria[64], and Caltrans requirements (if applicable). Furthermore, consistent with City standard procedures, the project would be required to comply with the following standard conditions of approval.

Standard Conditions of Approval:

COA AES-1.1: Both Project Options: The project (under either option) shall implement the following measures:

- **Lighting Plan.** The applicant shall submit a lighting plan in building permit drawings. This plan should include photometric contours, manufacturer's specifications on the fixtures, and mounting heights. The design and location of

[62] Public views are those that are experienced from publicly accessible vantage points.
[63] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 36-39.
[64] City of Mountain View, Standard Design Criteria. August 2022.

outdoor lighting fixtures shall ensure there would be no glare and light spillover to surrounding properties, which is demonstrated with photometric contours extending beyond the project property lines. The lighting plan submitted with building permit drawings must be approved by the Zoning Administrator prior to building permit issuance.

- **Both Project Options: Rooftop Deck Lighting.** Proposed lighting fixtures on the rooftop decks and courtyards shall not be visible from ground level on adjacent public streets. Any string lighting shall be designed to include shades to avoid light spillover and be screened so they are not visible from off-site. Limited pedestrian-scale/building-mounted lighting along pathways may be permitted subject to review and approval of photometric lighting plan submitted as part of the building permit drawings.

The project (under either option), therefore, would result in a less than significant aesthetics impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.1.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AES-1:	**Both Project Options:** The project (under either option) would not result in a significant aesthetics impact.	Yes	LTS	None	N/A
Abbreviations: LTS – Less than Significant					

5.2 AGRICULTURE AND FORESTRY RESOURCES

5.2.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for agriculture has not substantially changed since the certification of the Precise Plan EIR.

5.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The highest quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[65]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[66]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[67] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[68]

[65] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed August 24, 2021. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

[66] California Department of Conservation. "Williamson Act." Accessed September 8, 2021. http://www.conservation.ca.gov/dlrp/lca.

[67] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

[68] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed August 24, 2021. http://frap.fire.ca.gov/.

5.2.1.2 *Existing Conditions*

According to the Santa Clara County Important Farmland 2016 map, the project site is designated as Urban and Built-Up Land, meaning the land contains a building density of at least six units per 10-acre parcel or is used for industrial or commercial purposes, golf courses, landfills, airports, or other utilities.[69] The project site is not currently used for agricultural or forestry uses and has a General Plan land use designation of High Intensity Office and East Whisman Mixed-Use. The site is zoned P-41 East Whisman Precise Plan. The site is currently developed with office buildings and light industrial, surface parking, and landscaping. The project site is not located adjacent to areas used for agricultural or forestry uses. The nearest agricultural uses to the project site are located at 253 North Whisman Road, approximately 575 feet southwest of the project site. The property at 253 North Whisman Road has an Agriculture (AW) zoning designation, and is designated as Unique Farmland in the Farmland Mapping and Monitoring Program.[70] The property is currently under a Williamson Act contract.[71]

5.2.2 Impact Discussion

For the purpose of determining the significance of the project's impact on agriculture and forestry resources, would the project:

1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
3) 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))?
4) Result in a loss of forest land or conversion of forest land to non-forest use?
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

[69] California Department of Conservation. "California Important Farmland Finder." Accessed September 8, 2021. https://maps.conservation.ca.gov/DLRP/CIFF/
[70] Ibid.
[71] City of Mountain View. *Draft 2030 General Plan and Greenhouse Gas Reduction Strategy Program EIR.* September 2012. Pp. 58 – 60.

5.2.2.1 *Project Impacts*

The Precise Plan area does not include agricultural or forestry resources, therefore, the EWPP EIR did not include an analysis of potential agriculture and forestry resources impacts because the implementation of the Precise Plan would not impact those resources. There would continue to be no impacts to agriculture or forestry resources with the project. This is exemplified in the discussion below.

Impact AG-1:	**Both Project Options:** The project (under either option) would not 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. **(Same Impact as Approved Project [No Impact])**

As discussed in Section 4.2.1.2 Existing Conditions, the project site is designated as Urban and Built-Up Land in the Santa Clara County Important Farmland 2016 map. None of the parcels within the project site are designated as farmland pursuant to FMMP maps. Therefore, implementation of the project (under either option) would not convert farmland to non-agricultural uses. **(Same Impact as Approved Project [No Impact])**

Impact AG-2:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(Same Impact as Approved Project [No Impact])**

The project site is not used or zoned for agricultural use, nor is the project site subject to a Williamson Act contract. For these reasons, implementation of the project (under either option) would not conflict with existing zoning or a Williamson Act contract. **(Same Impact as Approved Project [No Impact])**

Impact AG-3:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(Same Impact as Approved Project [No Impact])**

As discussed in Section 5.2.1.2 Existing Conditions above, the project site is zoned for urban uses and is not used or zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the project (under either option) would not conflict with existing zoning for (or cause rezoning of) forest land, timberland, or timberland zoned Timberland Production. **(Same Impact as Approved Project [No Impact])**

Impact AG-4:	**Both Project Options:** The project (under either option) would not result in a loss of forest land or conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

The project site is not used as forest land, designated as forest land, or located adjacent to forest land. The project (under either option) would, therefore, not result in a loss of forest land or a conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

Impact AG-5:	**Both Project Options:** The project (under either option) would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

As discussed previously in Section 5.2.1.2 Existing Conditions, the project site and most of the surrounding area are designated as Urban Built-Up Land. There is no designated forest land on the project site or surrounding area. Isolated agricultural land, currently used for orchards, is located approximately 575 feet southwest of the project site on the south side of East Middlefield Road. Generally, increased urban development in proximity to agricultural lands could result in increased development pressure on agricultural lands to convert to nonagricultural uses due to the increased land value and limited access to agricultural support industries. This agricultural land, however, is currently under an active Williamson Act contract, which prevents land under contract from being used for any purposes other than commercial production of agricultural commodities. For this reason, the project (under either option) would not result in the conversion of farmland or forest land to a non-agricultural or non-forest use. **(Same Impact as Approved Project [No Impact])**

5.2.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AG-1:	**Both Project Options:** The project (under either option) would not 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.	Yes	NI	None	N/A
AG-2:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for agricultural use, or a Williamson Act contract.	Yes	NI	None	N/A
AG-3:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for, or cause	Yes	NI	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
	rezoning of, forest land, timberland, or timberland zoned Timberland Production				
AG-4:	**Both Project Options:** The project (under either option) would not result in a loss of forest land or conversion of forest land to non-forest use.	Yes	NI	None	N/A
AG-5:	**Both Project Options:** The project (under either option) would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	Yes	NI	None	N/A
Abbreviation: NI – No Impact					

5.3 BIOLOGICAL RESOURCES

The discussion in this section is based, in part, on an arborist report prepared by HortScience | Bartlett Consulting. This report is attached as Appendix D.

5.3.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for biological resources has not substantially changed since the certification of the Precise Plan EIR.

5.3.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

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

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[72] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

[72] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed August 19, 2021. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), VTA, USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to biological resources. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 16.3	**Habitat.** Protect and enhance nesting, foraging and other habitat for special-status species and other wildlife.
INC 16.6	**Built environment habitat.** Integrate biological resources, such as green roofs and native landscaping, into the built environment.
Parks, Open Space and Community Facilities	
POS 12.1	**Heritage trees.** Protect trees as an ecological and biological resource.
POS 12.2	**Urban tree canopy.** Increase tree canopy coverage to expand shaded areas, enhance aesthetics and help reduce greenhouse gases.
POS 12.3	**Planter strip.** Require tree planter strips be wide enough to support healthy trees and well-maintained public infrastructure.

Policy	Description
POS 12.4	**Drought-tolerant landscaping.** Increase water-efficient, drought-tolerant and native landscaping where appropriate on public and private property.

Source: City of Mountain View, *Mountain View 2030 General Plan.* July 10, 2012. Pp.135, 152, 59

East Whisman Precise Plan

The Precise Plan contains policies and guidelines related to biological resources. Landscaping and sustainability guidelines include planting native plants and tree species that support native wildlife and build biological diversity.

Mountain View City Code

Section 32.25 of the City Code contains Heritage tree preservation standards that require maintenance and preservation of Heritage trees, tree removal permits for the removal of Heritage trees, and conditions for preservation during construction or grading activity. Mountain View City Code Chapter 32, Article II defines a "Heritage Tree" as a tree with any of the following characteristics: a tree trunk with a circumference of forty-eight inches or more, measured at fifty-four inches above natural grade. Multi-trunk trees are measured just below the first major trunk fork. Any of the following three species of trees with a circumference of twelve inches or more, measured at fifty-four inches above natural grade: Quercus (oak), Sequoia (redwood), Cedrus (cedar), and groves of trees designated as "heritage" by the City Council.

5.3.1.2 *Existing Conditions*

The project site is within an urban area and provides habitat and foraging opportunities for urban-adapted birds. No rare, threatened, endangered, or special-status species are known to inhabit the project site, as described in the Precise Plan EIR.[73] The primary biological resource on-site is trees. The project site contains 1,032 trees, including 310 Heritage trees. No wetlands are present on the project site. The nearest wetlands to the project site are freshwater ponds located within the Sunnyvale Municipal Golf Course, approximately 500 feet east of the project site, and Stevens Creek riverine habitat approximately 0.9-mile west of the project site.

5.3.2 Impact Discussion

For the purpose of determining the significance of the project's impact on biological resources, would the project:

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

[73] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 64.

3) 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?
4) 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?
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.3.2.1 *Project Impacts*

Impact BIO-1:	**Both Project Options:** The project (under either option) would not 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 CDFW or USFWS. **(Same Impact as Approved Project [Less than Significant Impact])**

Special Status Species

The Precise Plan EIR concluded that, based on the highly urbanized and developed nature of the Precise Plan area, no natural communities or habitats for special-status plant and animal species are present and implementation of the Precise Plan (including development of the project site) would not result in impacts to special-status species or sensitive habitats.[74] The conditions in and around the project site have not changed substantially since the certification of the Precise Plan EIR. For this reason, the project (under either option) would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [No Impact])**

Nesting Birds

The existing buildings, mature trees, and vegetation on-site can provide foraging and nesting opportunities for a variety of bird species. The proposed project (under either option) would demolish existing buildings, remove 823 existing on-site trees (including 310 Heritage trees), and remove other landscaping/vegetation. Raptors (birds of prey) and nesting birds are protected by the MBTA and the CDFW code requirements. Urban-adapted raptors or other avian nests present on or adjacent to the site could be disturbed by project construction activities and result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW and would constitute a significant impact.

In compliance with the MBTA and CDFW code and consistent with the Precise Plan EIR, the project (under either option) shall implement the following City standard condition of approval to reduce or avoid construction-related impacts to nesting birds (including raptors) and their nests to a less than significant level.

[74] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp 65.

Standard Condition of Approval:

COA BIO-1.1: **Both Project Options: Preconstruction Nesting Bird Survey**. To the extent practicable, vegetation removal and construction activities shall be performed from September 1 through January 31 to avoid the general nesting period for birds. If construction or vegetation removal cannot be performed during this period, preconstruction surveys shall be performed no more than two days prior to construction activities to locate any active nests as follows:

- The applicant shall be responsible for the retention of a qualified biologist to conduct a survey of the project site and surrounding 500 feet for active nests—with particular emphasis on nests of migratory birds if construction (including site preparation) begins during the bird nesting season, from February 1 through August 31. If active nests are observed on either the project site or surrounding area, the project biologist, in coordination with the appropriate City staff, shall establish no-disturbance buffer zones around the nests (usually 100 feet for perching birds and 300 feet for raptors). The no-disturbance buffer shall remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more and then resumes during the nesting season, an additional survey shall be necessary to avoid impacts on active bird nests that may be present.

With the implementation of the above standard condition of approval, the project (under either option) would result in a less than significant impact to nesting birds because preconstruction surveys would ensure no nesting birds or nests are located on-site during construction and if they are, then buffer zones would be established around nests during construction. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Bird Strike Hazards

Bird safe design measures included in the Precise Plan are intended to help diminish the likelihood of building collision fatalities through façade treatments and light pollution reduction. The proposed project would be required to incorporate the following Precise Plan design standards to reduce bird collision risk, which can be found in Chapter 4 of the Precise Plan.

1. **Façade Treatments**. No more than 10 percent of the surface area of a building's total exterior façade shall have bird-friendly glazing between the ground and 60 feet above ground. Examples of bird-friendly glazing treatments include opaque glass, covering of clear glass surface with patterns, use of paned glass with fenestration patterns, and use of external screens over non-reflective glass.
2. **Occupancy Sensors**. For non-residential development, occupancy sensors or other switch control devices shall be installed on non-emergency lights. These lights should be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.
3. **Funneling of Flight Paths**. New construction shall avoid funneling of flight paths along buildings or trees towards a building façade.
4. **Skyways, Walkways, or Glass Walls**. New construction and building additions shall avoid building glass skyways or walkways, freestanding glass walls, transparent building corners, or

landscaping behind glass (such as in atriums). New construction and building additions should minimize the use of glass at tops of buildings, especially when incorporating a green roof into the design.

5. **Exceptions to the Bird Safe Design Requirements**. The City may waive or reduce any of this chapter's bird safe design requirements based on analysis by a qualified biologist indicating that proposed construction would not pose a collision hazard to birds. Alternatively, additional design measures may be required based on an analysis by a qualified biologist.

These features would be incorporated into the final development plans for the project (under either option), which would be reviewed by the Planning Division at the time of planning and building permits to ensure proper implementation (consistent with the Precise Plan). With incorporation of the above standard condition of approval and Precise Plan standards, the project (under either option) would have a less than significant impact to bird species due to collisions by implementing façade treatments and light pollution reduction, which would deter birds. This is the same impact as disclosed in the Precise Plan EIR.[75] **(Same Impact as Approved Project [Less than Significant])**

Impact BIO-2:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Same Impact as Approved Project [No Impact])**

There is no riparian habitat or wetland on or adjacent to the site. The nearest wetlands to the project site are freshwater ponds in Sunnyvale Municipal Golf Course, approximately 500 feet east and Stevens Creek riverine habitat approximately 0.9-mile west of the project site.[76] Project construction would not impact either area because activities would be contained on the project site and the off-site construction staging areas. For these reasons, the project would not have an impact on state or federally protected riparian habitat, sensitive natural community, or wetlands. This is the same impact as disclosed in the Precise Plan EIR.[77] **(Same Impact as Approved Project [No Impact])**

Impact BIO-3:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Same Impact as Approved Project [No Impact])**

See discussion under Impact BIO-2 above. The project (under either option) would not impact wetlands. **(Same Impact as Approved Project [No Impact])**

[75] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 66.
[76] United States Fish and Wildlife Service. *National Wetlands Inventory, Surface Waters and Wetlands.* Map. November 2019.
[77] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 67.

Impact BIO-4:	**Both Project Options:** The project (under either option) would not 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. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is currently developed and surrounded by existing urban development. There are no waterways on-site. Neither the site nor adjacent properties contain any riparian corridors, wildlife areas, open space, or wetlands that provide habitat or movement corridors for fish or other wildlife species. In addition, as discussed under Impact BIO-1, the project shall incorporate bird safe building design measures to reduce bird collision fatalities, and implement standard conditions of approval to protect nesting birds. The project site is not within a location consisting of high concentrations of breeding wildlife of one or several species. The development of the project (under either option), therefore, would not impact a wildlife nursery site. This is the same impact as disclosed in the Precise Plan EIR.[78] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact BIO-5:	**Both Project Options:** The project (under either option) would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Same Impact as Approved Project [Less than Significant Impact])**

General Plan Policies

The project (under either option) would integrate native and drought-tolerant landscaping (consistent with General Plan Policy INC 16.6) and would be required to follow standard conditions of approval to protect nesting birds during construction (consistent with General Plan Policy 16.3). The project (under both options), therefore, would comply with General Plan policies related to biological resource protection. This is the same impact as disclosed in the Precise Plan EIR.[79] **(Same Impact as Approved Project [Less than Significant Impact])**

Precise Plan Policies

The project (under either option) would plant native plants and tree species that support native wildlife and build biological diversity, consistent with Precise Plan requirements for biological resources. The project (under either option), therefore, would comply with Precise Plan policies related to biological resource protection. **(Same Impact as Approved Project [Less than Significant Impact])**

Tree Preservation Ordinance

The project (under either option) would remove 823 existing on-site trees, including 310 Heritage trees, from the project site. The project would plant a minimum of 620 new trees. The City of Mountain View regulations require a permit to remove or move any tree over 48-inches in circumference or any oak, Sequoia, or cedar over 12-inches in circumference (measured at 54-inch above grade). A City of

[78] Ibid. P 66.
[79] Ibid. P 67.

Mountain View Heritage Tree Removal Permit is required before any Heritage trees are removed. The proposed project would implement the following standard City conditions of approval to comply with the City's Tree Preservation Ordinance and other city policies.

Standard Condition of Approval:

COA BIO-2.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Arborist Report.** A qualified arborist shall provide written instructions for the care of the existing tree(s) to remain on-site before, during, and after construction. The report shall also include a detailed plan showing installation of chain link fencing around the dripline to protect these trees and installation of an irrigation drip system and water tie-in for supplemental water during construction. Arborist's reports shall be received by the Planning Division and must be approved prior to issuance of building permits. Prior to occupancy, the arborist shall certify in writing that all tree preservation measures have been implemented. Approved measures from the report shall be included in the building permit drawings.
- **Arborist Inspections.** During demolition activity and upon demolition completion, a qualified arborist shall inspect and verify the measures described in the arborist report are appropriately implemented for construction activity near and around the preserved trees, including the critical root zones. Should it be determined that the root systems are more extensive than previously identified and/or concerns are raised of nearby excavation or construction activities for the project foundation or underground parking garage, the design of the building and/or parking garage may need to be altered to maintain the health of the trees prior to building permit issuance.
- **Monthly Arborist Inspections.** Throughout demolition and construction, a qualified arborist must conduct monthly inspections to ensure tree protection measures and maintenance care are provided. A copy of the inspection letter, including recommendations for modifications to tree care or construction activity to maintain tree health, shall be provided to the Planning Division at planning.division@mountainview.gov.
- **Replacement**. The applicant shall offset the loss of each Heritage tree with a minimum of two new trees. Each replacement tree shall be no smaller than a 24-inch box and shall be noted on the landscape plans submitted for building permit review as Heritage replacement trees.
- **Street Tree Protections.** All designated City street trees to remain are to be protected throughout construction activity with protection measures shown on building permit plans.
- **Tree Protection Measures**. The tree protection measures listed in the projects arborist report shall be included as notes on the title sheet of all grading and landscape plans. These measures shall include, but may not be limited to, six-foot chain link fencing at the drip line, a continuous maintenance and care

program, and protective grading techniques. Also, no materials may be stored within the drip line of any tree on the project site.

- **Tree Mitigation and Preservation Plan**. The applicant shall develop a tree mitigation and preservation plan to avoid impacts on regulated trees and mitigate for the loss of trees that cannot be avoided. The plan shall also outline measures to be taken to preserve off-site trees. Routine monitoring for the first five years and corrective actions for trees that consistently fail the performance standards shall be included in the tree mitigation and preservation plan. The tree mitigation and preservation plan shall be developed in accordance with Chapter 32, Articles I and II, of the City Code, and subject to approval of the Zoning Administrator prior to removal or disturbance of any Heritage trees resulting from project activities, including site preparation activities.

In conclusion, with implementation of the above standard condition of approval, the project (under either option) would be consistent with the City's General Plan Policies, Precise Plan Policies, and City's Tree Preservation Ordinance and policies. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact BIO-6:	**Both Project Options:** The project (under either option) would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is not part of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The project (under either option), therefore, would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) is a conservation program to promote the recovery of endangered species in portions of Santa Clara County while accommodating planned development, infrastructure and maintenance activities. The Precise Plan area, including the project site, is located outside the Habitat Plan area and outside of the expanded study area for burrowing owl conservation.

Nitrogen deposition contribution estimates of impacts on serpentine habitat in Santa Clara County were made as a part of the development of the Habitat Plan. The Precise Plan EIR concluded the nitrogen emissions (based on existing and future vehicle emissions) that would result from build-out of the Precise Plan are less than cumulatively considerable (given that buildout of the Precise Plan is a small portion of Santa Clara County's overall emissions).[80] The Habitat Plan accounts for the indirect impacts of nitrogen deposition (existing and future) and identifies measures to conserve and manage serpentine areas over the term of the Habitat Plan, such that cumulative impacts to this habitat and associated special-status species would not be significant and adverse. For these reasons, the project

[80] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. January 2020. Pp. 68-69.

(under either option) would not conflict with an adopted habitat conservation plan. Impacts would be consistent with those identified in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.3.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIO-1:	**Both Project Options:** The project (under either option) would not 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 CDFW or USFWS.	Yes	LTS	None	N/A
BIO-2:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	Yes	NI	None	N/A
BIO-3:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.	Yes	NI	None	N/A
BIO-4:	**Both Project Options:** The project (under either option) would not 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.	Yes	LTS	None	N/A
BIO-5:	**Both Project Options:** The project (under either option) would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Yes	LTS	None	N/A
BIO-6:	**Both Project Options:** The project (under either option) would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Yes	LTS	None	N/A

Abbreviations: LTS – Less than Significant, NI – No Impact

5.4 CULTURAL RESOURCES

The following discussion is based, in part, on a Historic Resources Evaluation completed by ESA and peer reviewed by PaleoWest. The Historic Resources Evaluation and peer review memorandum are attached as Appendix E.

5.4.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for cultural resources has not substantially changed since the certification of the Precise Plan EIR.

5.4.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection of cultural resources is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800 et seq.) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history (Criterion 1);
    - Association with the lives of persons significant in the past (Criterion 2);
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (Criterion 3); or
    - Has yielded, or may yield, information important to prehistory or history (Criterion 4); and
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic

Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[81]

Historical resources eligible for listing in the CRHR must meet the significance criteria described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." If a property is determined not to be historically significant, by definition, it does not have integrity. The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include: 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease, and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction; establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

[81] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to cultural resources. The following goals and policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 11.5	**Archaeological and paleontological site protection.** Require all new development to meet state codes regarding the identification and protection of archaeological and paleontological deposits.
LUD 11.6	**Human remains.** Require all new development to meet state codes regarding the identification and protection of human remains.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. P. 54

5.4.1.2 *Existing Conditions*

Historic Resources

There are no known historic resources within the Precise Plan area (which includes the project site).[82,83,84] The project site is currently developed with 23 office/light industrial buildings that were constructed between the 1960s and 1990s. Of the 23 existing buildings on-site, the following 20 are 45 years or older[85] (refer to Figure 5.4-1 for the location of these buildings within the project):

1	433 Clyde Avenue (1967)	11	520-526 Clyde Avenue (1972)
2	485 Clyde Avenue (1970)	12	440 Clyde Avenue (1965)
3	495 Clyde Avenue (1968)	13	450 Clyde Avenue (1965)
4	500 Logue Avenue (1972)	14	420 Clyde Avenue (1968)
5	510 Logue Avenue (1972)	15	880 Maude Avenue (1968)
6	520 Logue Avenue (1972)	16	800 Maude Avenue (1968)
7	530 Logue Avenue (1972)	17	830 Maude Avenue (1968)
8	433 Clyde Avenue (1967)	18	840-850 Maude Avenue (1968)
9	500-506 Clyde Avenue (1972)	19	440 Logue Avenue (1964)
10	510-516 Clyde Avenue (1972)	20	885 Maude Avenue (1963)

[82] National Park Service. National Register of Historic Places. Accessed November 12, 2021. https://www.nps.gov/subjects/nationalregister/database-research.htm

[83] California State Parks Office of Historic Preservation. California Register of Historical Resources. Accessed November 12, 2021. https://ohp.parks.ca.gov/?page_id=21238

[84] City of Mountain View. Register of Historic Resources. Accessed November 12, 2021. https://www.livablemv.org/wp-content/uploads/2018/09/MV-Local-Historic-Registry-List.pdf

[85] Per the National Historic Preservation Act, properties 50 years or older meet the minimum age requirement for potential eligibility as historic resources. Due to the duration of project construction (8.5 years), structures that are 45 years old when this EIR was prepared were included because they would meet the minimum age requirement for potential eligibility during project construction.

LOCATION OF BUILDINGS 45 YEARS AND OLDER | FIGURE 5.4-1

According to a Historic Resources Survey Report provided by the applicant and peer review of that analysis by the City's consultant, none of the buildings on the project site have been identified as historic resources in the City of Mountain View Register of Historic Resources, or are listed or are eligible for listing on the CRHR or the NRHP.[86,87] While the 20 existing buildings are associated with sprawling development of office parks in Silicon Valley, this pattern of development is typical for the time and none of the structures appear to have risen above typical associations with these events. For these reasons, the buildings are not considered eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 1. Archival research on the 20 buildings did not reveal any significant associations with people or businesses in a potential period of significance for these buildings. Therefore, the buildings are not considered eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 2. The 20 buildings are typical and modest examples of corporate modern architectural style and are not the work of a master architect or builder. For these reasons, the buildings are not eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 3. Furthermore, the 20 buildings do not have the potential to yield more information and, therefore, are not eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 4. Although the buildings were constructed in the same timeframe and share a historical association to early Silicon Valley, neither the group, or a subset of them represent a historic district. As a collection of buildings, they represent typical suburban office park development from the late 1960s and 1970s, and do not possess characteristics that would make them unique or significant for the period. Because the buildings are not historically significant, they do not possess integrity and no integrity analysis is required.

Prehistoric Resources

As part of the Precise Plan EIR, a records search was conducted at the Northwest Information Center (NWIC) of California Historical Resources Information System (CHRIS), including an examination of the official records and maps for archaeological sites and surveys in the Precise Plan area, as well as a review of the NRHP, the CRHR, the California Inventory of Historic Resources, California State Landmarks, California Points of Historical Interest, the Directory of Properties in the Historical Resources Inventory, Caltrans Local Bridges Surveys, and secondary sources pertaining to state and local prehistory and history. Based upon the research, archaeological resources were not identified on the project site.

Areas that are near natural water sources (e.g., riparian corridors and tidal marshland) would be considered highly sensitive for prehistoric archaeological deposits and human remains. The project site is approximately two miles from the San Francisco Bay and approximately 0.9-mile east of Stevens Creek. The freshwater ponds located within the Sunnyvale Municipal Golf Course are manmade water sources and were not present during the prehistoric period. Thus, the presence of these freshwater ponds does not indicate high sensitivity for prehistoric archaeological deposits or human remains. As discussed in the Precise Plan EIR, there are no known cultural resources within the Precise Plan area (which includes the project site), and the area is considered moderately archaeologically sensitive.[88]

[86] ESA. *East Whisman 19-Property Survey, Historic Resources Survey Report.* March 2022.
[87] PaleoWest. *Peer Review Memorandum, East Whisman 19-Property Survey, Historic Resources Survey Report.* March 2022.
[88] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp 72.

5.4.2 Impact Discussion

For the purpose of determining the significance of the project's impact on cultural resources, would the project:

1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?
3) Disturb any human remains, including those interred outside of dedicated cemeteries?

5.4.2.1 *Project Impacts*

Impact CUL-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(Same Impact as Approved Project [Less than Significant Impact])**

As noted in Section 5.4.1.2 Existing Conditions, there are no known historic resources within the Precise Plan. Due to the length of the proposed construction period (8.5 years), buildings on-site that are 45 years or older have the potential to meet the minimum age requirement (50 years) for eligibility as a historic resource during buildout of the project. The historic evaluation of these buildings, included in Appendix E and summarized in Section 5.4.1.2 Existing Conditions, concluded that none of the buildings are listed on or eligible for listing on a federal, state, or Mountain View list of historic resources. Furthermore, although the buildings were constructed in the same timeframe and share a historical association to early Silicon Valley, neither the group, or a subset of them represent a historic district (refer to Appendix E for further details). No buildings on or adjacent to the project site contain historic resources; therefore, construction of the project would not impact off-site historic resources.[89] For these reasons, the project (under either option) would have a less than significant impact to historic resources. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact Impact])**

Impact CUL-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is currently developed and, as discussed in the Precise Plan EIR, it is unlikely that buried historical or prehistorical resources are present in most developed areas.[90] Although it is unlikely that buried historic or prehistoric buried archaeological and paleontological resources are present on the site, these resources could be encountered during excavation, construction, or

[89] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 72.
[90] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 74.

infrastructure improvements for the project, resulting in a significant impact. The project (under either option) would implement the below standard conditions of approval related to the discovery of pre-historic or historic period archaeological resources and human remains (in compliance with General Plan Policies LU-11.5 and LU-11.6), should they be encountered on the site.

With incorporation of the following standard conditions of approval (as updated per consultation with Tamien Nation on November 22, 2021 and December 30, 2021), the project (under either option) would not result in a new or substantially more severe significant environmental impact than disclosed in the Precise Plan EIR.

Standard Condition of Approval:

COA CUL-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Cultural Sensitivity Training.** As requested during the Tribal Consultation process for the project, Tribal Cultural Sensitivity Training shall be provided to the construction crews at the beginning of the project to aid those involved in the project to become more familiar with indigenous history of peoples in the vicinity of the project site.
- **Native American Archaeological Monitor.** A Tamien Nation Tribal monitor shall be present for all ground-disturbing activities throughout the project construction process.
- **Discovery of Archaeological and Tribal Cultural Resources**. If indigenous or historic-era cultural materials are unearthed during ground-disturbing activities, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The City and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archaeology, and Tamien Nation shall be immediately informed of the discovery. The qualified archaeologist and a Tamien Nation Tribal representative shall inspect the find within 24 hours of discovery and notify the City of their initial assessment. Indigenous archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and wall, filled wells or privies, and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with a Tamien Nation Tribal representative, shall develop a treatment plan that could include site avoidance, capping, or data recovery.
- **Discovery of Human Remains**. In the event of the discovery of human remains during construction or demolition, there shall be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains.

The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his/her authority, he/she shall notify the NAHC, which shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the landowner shall reinter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

A final report shall be submitted to the City's Community Development Director prior to release of a Certificate of Occupancy. This report shall contain a description of the mitigation programs and its results, including a description of the monitoring and testing resources analysis methodology and conclusions, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the City's Community Development Director.

The project (under either option), in compliance with the above standard conditions of approval, would reduce impacts to unknown archaeological resources to a less than significant level by stopping work and monitoring resources to avoid impacts in the event of a discovery. This is the same impact as discussed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact CUL-3:	**Both Project Options:** The project (under either option) would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Same Impact as Approved Project [Less than Significant Impact])**

See discussion under Impact CUL-2. The project (under either option) would implement the standard conditions of approval. **(Same Impact as Approved Project [Less than Significant Impact])**

5.4.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
CUL-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.	Yes	LTS	None	N/A
CUL-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
CUL-3:	**Both Project Options:** The project (under either option) would not disturb any human remains, including those interred outside of dedicated cemeteries.	Yes	LTS	None	N/A
Abbreviations: NI – No Impact, LTS – Less than Significant					

5.5 ENERGY

The following discussion is based, in part, on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. This report is attached as Appendix C.

5.5.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for energy resources has not substantially changed since the certification of the Precise Plan EIR.

5.5.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[91] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[92]

California Green Building Standards Code

CalGreen establishes mandatory green building standards for buildings in California. CalGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CalGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[93]

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to energy impacts. The following policy is applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD-10.5	**Building energy efficiency.** Incorporate energy-efficient design features and materials into new and remodeled buildings.

Source: City of Mountain View, *Mountain View 2030 General Plan*. July 10, 2012. P. 53

[91] California Building Standards Commission. "California Building Standards Code." Accessed August 30, 2021. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[92] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed August 30, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.
[93] California Air Resources Board. "The Advanced Clean Cars Program." Accessed October 14, 2021. https://www.arb.ca.gov/msprog/acc/acc.htm.

Greenhouse Gas Reduction Program

The City's Greenhouse Gas Reduction Program (GGRP) mitigates the environmental impacts of the General Plan and identifies strategies and measures to achieve BAAQMD 2030 emissions reductions goals. The GGRP includes measures to reduce emissions such as green building performance and vehicle trip reduction requirements.

East Whisman Precise Plan

The Precise Plan contains standards, policies, and guidelines related to energy resources. Precise Plan development standards and bonus FAR requirements include requirements for residential and non-residential building energy efficiency and renewable energy generation. The Precise Plan requires vehicle trip caps, dual plumbing for potable and recycled water use, climate-resilient and drought tolerant landscaping, and implementation of sustainable building designs and materials. The Precise Plan also requires new nonresidential Bonus FAR development to meet the intent of LEED BD+C Platinum or equivalent, and new residential Bonus FAR development to meet the intent of 120 points on the Green Point Rated system or equivalent, along with submetering, or other technology that can track individual energy use, for each residential unit.

Mountain View Green Building Code and Reach Code

The Mountain View Green Building Code (MVGBC) amends the state-mandated CalGreen standards to include local green building standards and requirements for private development. The MVGBC does not require formal certification from a third-party organization but requires projects to be designed and constructed to meet the intent of a third-party rating system.[94] For residential projects proposing over five units, the MVGBC requires those buildings meet the intent of 70 GreenPoint Rated points from the Build it Green certification program, as well as compliance with mandatory CalGreen requirements. For non-residential projects proposing buildings between 5,000 and 25,000 square feet, the MVGBC requires those buildings meet the intent of LEED Certified and mandatory CalGreen requirements. For buildings over 25,000 square feet, the MVGBC requires those buildings meet the intent of LEED Silver and mandatory CalGreen requirements. Additionally, development projects subject to CalGreen requirements are required to divert at least 65 percent of construction debris from landfills.

In 2019, the Mountain View City Council approved amendments to Chapters 8, 14, and 24 of the MVGBC, referred to as Reach Code amendments. The Reach Code amendments are applicable to any project submitted after December 31, 2019. These Reach Code amendments require new buildings to be all-electric with an exception for commercial spaces with specialized equipment that cannot operate with electric service if approved by the City.

[94] City of Mountain View. *Mountain View Green Building Code*. 2019. Accessed November 15, 2021. https://www.mountainview.gov/depts/comdev/building/construction/2019_mountain_view_green_building_and_reach_codes.asp

City of Mountain View Construction and Demolition Ordinance

According to the City's Construction and Demolition Ordinance, all development projects involving demolition of greater than 5,000 square feet are required to divert 50 percent of construction demolition debris from landfills. Documentation of this diversion is required prior to scheduling a final building inspection.

5.5.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.[95] Out of the 50 states, California is ranked 2nd in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses, and 39 percent (3,073 trillion Btu) for transportation.[96] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2019 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2019, a total of approximately 16,664 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.

The community-owned SVCE is the electricity provider for the City of Mountain View.[97] SVCE sources the electricity, and PG&E delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan and can upgrade to the GreenPrime plan.[98] Both options are considered 100 percent GHG-emission free.

The electricity demand for existing uses on-site is approximately 11.7 million-kilowatt hours kWh per year.

Natural Gas

PG&E provides natural gas services within the City of Mountain View. In 2019, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[99] In 2019, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial

[95] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed October 14, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[96] Ibid.
[97] Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed August 30, 2021. https://www.svcleanenergy.org/faqs.
[98] The GreenStart plan offers customers carbon free electricity service from 50 percent renewable sources and the GreenPrime plan offers customers carbon free electricity from 100 percent renewable sources. Source: Silicon Valley Clean Energy. "Your Choices – SVCE." Accessed October 25, 2021. https://www.svcleanenergy.org/choices/#GreenStart
[99] California Gas and Electric Utilities. 2020 *California Gas Report.* Accessed August 30, 2021. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

sector used 35 percent, and other uses used six percent.[100] Transportation accounted for one percent of natural gas use in California. In 2019, Santa Clara County used approximately two percent of the state's total consumption of natural gas.[101]

The natural gas demand for existing uses on-site is approximately 11 million kilo British thermal units (kBtu) per year.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline was sold in California.[102] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.[103] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.[104,105]

The gasoline demand for existing uses on-site is approximately 455,875 gallons per year.

5.5.2 Impact Discussion

For the purpose of determining the significance of the project's impact on energy, would the project:

1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

[100] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 30, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[101] California Energy Commission. "Natural Gas Consumption by County." Accessed August 30, 2021. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[102] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 30, 2021. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[103] United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf
[104] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed October 14, 2021. http://www.afdc.energy.gov/laws/eisa.
[105] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed October 14, 2021. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

1.1.1.2 *Project Impacts*

Impact EN-1:	**Both Project Options:** The project (under either option) would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded the construction and operation of development under the Precise Plan would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy or wasteful use of energy resources because:

- Construction processes are generally designed to be efficient,
- Development would occur in an urbanized area with access to roadways, construction supplies, and workers,
- Standard BAAQMD BMPs would be implemented to restrict construction equipment idling times and prohibit unnecessary idling,
- Construction equipment with reduced emissions would be used,
- Projects would comply with the City's requirements to recycle and/or salvage for reuse a minimum of 65 percent of nonhazardous construction and demolition waste, and
- Projects would comply with Precise Plan green building standards.[106]

In addition, as discussed in the Precise Plan EIR, implementation of the Precise Plan (which includes the project under either option) would result in an overall decrease in gasoline use due to the Precise Plan area's proximity to transit, requirement for TDM plans, and mix of land uses. The annual energy demand of the Precise Plan at buildout is estimated to be approximately 156.1 million kWh of electricity, 188.2 million kBtu of natural gas, and 1.6 million gallons of gasoline.[107]

The project is consistent with the development analyzed in the Precise Plan EIR and, therefore, the energy demand by the project was accounted for in the Precise Plan EIR. The construction of the project is estimated to use gasoline and diesel fuel for vehicles, equipment, and generators, and electricity for tools. There is currently no acceptable standard model or accurate way to predict construction energy demand. Therefore, the construction energy demand for the project (under either option) was not quantified.

The project-specific air quality analysis quantified energy use and demand associated with the project with District Utilities System Option (refer to Appendix C**)**. A summary of the operational energy demand calculated for the project with District Utilities System Option is provided in Table 5.5-1 below. As noted in Section 3.0 Project Description above, the project applicant is considering the District Utilities System Option to further their corporate sustainability goals. Energy demand from construction and operation of the proposed buildings would remain the same under either project option. The operation of the CUP, district heating and cooling system, and district distribution system would be in addition to continued operation of the City's existing utilities systems, as there is no

[106] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 80 – 82.
[107] Ibid. P. 81.

assumed reduction of municipal utility capacity due to the addition of the CUP facilities. Because the City must ensure the existing utilities systems can accommodate the proposed development on the site in the event the District Utilities System is offline, the City must be prepared to service this site if needed. Therefore, this analysis evaluates these proposed CUP facilities as "additive" on the existing municipal utility operations. The analysis represents that additional energy would be required under the District Utilities System option. As shown in Table 5.5-1, on-site electricity and gasoline demand would increase and natural gas demand would decrease compared to existing conditions with implementation of the project (under either option). This is due to the replacement of existing electric/natural gas-powered buildings with new all electric buildings designed consistent with the City's Reach Code standards.[108]

Table 5.5-1: Existing and Project with District Utilities System Option Annual Energy Demand

	Electricity (kWh)	Natural Gas (kBtu)	Gasoline (gallons)[1]
A. Existing Land Uses	11,761,400	11,097,000	455,875
B. Project with District Utilities System Option	35,731,430	95,940	1,384,790
Net Increase in Demand (B-A)	23,970,030	-11,001,060	928,915

Note: The energy demand for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the operation of the CUP, district heating and cooling system, and district distribution system.

[1] The estimated gasoline demand is based on the estimated annual VMT of 11,351,292 for existing uses and the average fuel economy of 24.9 mpg.

[2] The estimated gasoline demand is based on the estimated annual VMT (refer to 4.2 Trip Summary Information for Middlefield Campus Operational in Attachment 2 of Appendix C) and the average fuel economy of 24.9 mpg.

kWh = kilowatt per hour

kBtu = kilo-British thermal unit

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

The energy demand and use during construction and operation of the project (under either option) would not be wasteful or inefficient because there is nothing atypical about the project's construction process, in addition to the same reasons listed for the Precise Plan. Specifically:

- The project site is in an urbanized area, proximate to roadways, construction supplies, and workers;
- Equipment and fuel would not be used wastefully on-site because of the added expense associated with renting the equipment as well as maintenance and fuel;
- The project would be required to implement standard BAAQMD BMPs, restricting construction equipment idling times and prohibiting unnecessary idling and requiring the use of Tier 4 construction equipment with reduced emissions;
- The project would also comply with the City's Reach Code requirements for all electric

[108] Per City Code Chapters 8, 14, and 24, all new construction buildings are required to be electric. Natural gas may be used for commercial spaces with specialized equipment that cannot operate with electric service (e.g., a restaurant with a pizza oven) subject to City approval.

building operations[109], rooftop solar panels, and electric vehicle infrastructure;
- The project would implement a TDM plan designed to reduce vehicle trips;
- The proposed office buildings would meet the intent of LEED Platinum green building standards; and
- The proposed residential buildings would achieve the equivalent of a GreenPoint rating of 120 points or better and include submetering for each residential unit, or an equivalent technology.

For all the reasons listed above, the project (under either option) would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact EN-2:	**Both Project Options:** The project (under either option) would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that future development under the Precise Plan (including the project under either option) would not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency (including the GGRP, RPS program, SB 350, Title 24, CalGreen, and MVGBC identified in Section 5.4.4.1) by:

- Implementing TDM plans,
- Obtaining 100 percent carbon free electricity from SVCE, or a similar provider, and
- Complying with Precise Plan building standards.[110]

The project (under either option) would implement a TDM plan, obtain 100 percent carbon free electricity from SVCE (or similar provider), and comply with Precise Plan building standards. For these reasons, the project (under either option) would result in the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[110] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 82.

5.5.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
EN-1:	**Both Project Options:** The project (under either option) would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Yes	LTS	None	N/A
EN-2:	**Both Project Options:** The project (under either option) would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant, N/A – Not Applicable					

5.6 GEOLOGY AND SOILS

The following discussion is based, in part, on geotechnical investigations performed by ENGEO and Ninyo & Moore. These reports are attached as Appendix F.

5.6.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for geology and soils has not substantially changed since the certification of the Precise Plan EIR.

5.6.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years, with the most recent update in 2018.

California Division of Occupational Safety and Health Regulations

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

injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to geology and soils impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 4.2	**Natural disasters.** Minimize impacts of natural disasters.
PSA 5.1	**New development.** Ensure new development addresses seismically induced geologic hazards.
PSA 5.2	**Alquist-Priolo zones.** Development shall comply with the Alquist-Priolo Earthquake Fault Zoning Act.
PSA 5.4	**Utility design.** Ensure new underground facilities, particularly water and natural gas lines, are designed to meet current seismic standards.
Infrastructure and Conservation	
INC 2.3	**Emergency-prepared infrastructure design.** Require the use of available technologies and earthquake-resistant materials in the design and construction of all infrastructure projects, whether constructed by the City or others.

Source: City of Mountain View, *Mountain View 2030 General Plan,* July 10, 2012. Pp. 177, 128

Mountain View City Code

The City of Mountain View has adopted the CBC, with amendments, as the reference building code for all projects in the City under Chapter 8 of the City Code. The City of Mountain View's Building Inspection Division is responsible for reviewing plans, issuing building permits, and conducting field inspections. Project-specific geotechnical investigation reports would be required for projects as a City standard condition of approval. Reports would be reviewed by the City of Mountain View's Building Inspection Division prior to issuance of building permits to ensure compliance.

5.6.1.2 *Existing Conditions*

On-site Geology

Soils

The project site is generally underlain by undocumented fill and silt and silty clay loam alluvium soils. The soils present in the area exhibit medium shrink-swell (i.e., expansive) behavior.[111,112]

Site Topography

The project site is relatively flat, and as a result, the risk of erosion or landslide is low. There are no hillsides or steep embankments within the project site that require consideration for development. The elevation of the site ranges from 51 to 62 feet above mean sea level.[113]

Groundwater

The project site is located in the Santa Clara Valley Subbasin, a groundwater subbasin that is 225 square miles in area. The project site is not located within or adjacent to any groundwater recharge facilities used by Valley Water.[114]

Soil borings were performed at select properties within the site and ranged between six to 16 feet below ground surface.

Seismic and Seismic-Related Hazards

Earthquake Faults

The project site is located within the seismically active San Francisco Bay region. Nearby active faults include the San Andreas Fault (10 miles to the west), the Calevaras Fault (14 miles to the southeast), and the Hayward Fault (nine miles to the northeast). The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone.[115]

[111] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2.* January 29, 2021. Revised February 8, 2021. P. 10.
[112] Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 440 Clyde Avenue.* April 3, 2020. P. 10.; Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 450 Clyde Avenue.* April 3, 2020. P. 10.; Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 441 Logue Avenue.* July 14, 2020. P. 10.
[113] Appendix G.
[114] Valley Water. *Annual Groundwater Report 2019.* July 2020. Accessed November 15, 2021. https://www.valleywater.org/sites/default/files/2020-09/2019_Annual_Groundwater_Report_Web_Version.pdf
[115] California Geological Survey. Earthquake Zones of Required Investigation. Accessed September 23, 2021. https://maps.conservation.ca.gov/cgs/EQZApp/app/

Liquefaction

Soil liquefaction can be defined as ground failure or loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. This phenomenon is triggered by earthquake or ground shaking that causes saturated or partially saturated soils to lose strength, potentially resulting in the soil's inability to support structures. The project site is located within a State of California liquefaction hazard zone.[116]

Other Geologic Hazards

The project site is not located within a geologic hazard zone for compressible soil, landslides, or fault rupture.[117]

Paleontological Resources

There have been no recorded fossils discovered within the City of Mountain View, though two fossils have been discovered outside of the Mountain View City limits (the location of one of these deposits is not known; however, the location of the other deposit is identified as approximately two miles west of the City's sphere of influence).[118] Fossiliferous deposits do exist in the City. Soils within the Precise Plan area could have paleontological sensitivity.[119]

5.6.2 Impact Discussion

For the purpose of determining the significance of the project's impact on geology and soils, would the project:

1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides?
2) Result in substantial soil erosion or the loss of topsoil?
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater

[116] Ibid.
[117] Ibid.
[118] City of Mountain View. *General Plan General Plan Environmental Impact Report.* September 2012. P. 470.
[119] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. January 2020. P. 87.

disposal systems where sewers are not available for the disposal of wastewater?

6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

5.6.2.1 *Project Impacts*

Impact GEO-1:	**Both Project Options:** The project (under either option) would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides**. (Same Impact as Approved Project [Less than Significant Impact])**

The project site is not located within the Alquist-Priolo special study zone on the California Geological Survey fault zone map.[120,121] No faults cross the site; therefore, fault rupture would not occur on-site. The project site, however, is located in a seismically active region, and strong to very strong ground shaking would be expected during the lifetime of the proposed project. Ground shaking on the site could damage structures and threaten future occupants of the proposed development. Additionally, as disclosed in the Precise Plan EIR, the project site is in a liquefaction hazard area.[122] Due to the relatively flat topography of the site and surrounding areas, the project would not be subject to substantial slope instability or landslide related hazards.

As identified in the Precise Plan, the proposed project would be designed and constructed in accordance with CBC requirements, Precise Plan EIR policies, General Plan Policies PSA 4.2, PSA 5.1, PSA 5.2, PSA 5.4, and INC 2.3, and the following standard condition of approval, in order to avoid and minimize seismic and seismic related hazards (including liquefaction) to a less than significant level.

Standard Condition of Approval:

COA GEO-1.1: **Both Project Options: Geotechnical Report**. The applicant shall have a design-level geotechnical investigation prepared which includes recommendations to address and mitigate geologic hazards in accordance with the specifications of California Geological Survey Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards, and the requirements of the Seismic Hazards Mapping Act. The report shall be submitted to the City prior to the issuance of building permits, and the recommendations made in the geotechnical report shall be implemented as part of the project. Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads;

[120] Department of Conservation, California Geological Survey. *Earthquake Zones of Required Investigation*. Map. 2019.
[121] ENGEO. *East Whisman Phase 1. Geotechnical Report for Horizontal Improvements at R1 and R2*. January29, 2021. Revised February 8, 2021.
[122] Ibid.

method for back draining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design. Additionally, recommendations shall include measures (e.g., shoring walls, and waterproofing) to minimize the amount of dewatering required during construction and prevent substantial impacts to aquifers or existing wells. Specific recommendations contained in the geotechnical report prepared for the project shall be implemented to the satisfaction of the City of Mountain View Building Inspection Division.

With implementation of the above standard condition of approval, and consistency with CBC and local policies, the project (under either option) would result in a less than significant impact from seismic and seismic-related hazards. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-2:	**Both Project Options:** The project (under either option) would not result in substantial soil erosion or the loss of topsoil. **(Same Impact as Approved Project [Less than Significant Impact])**

Given the site and site area's flat topography, the project (under either option) would not be subject to substantial erosion. In addition, the project (under either option) would implement standard conditions of approval (as described in detail in Section 5.9 Hydrology and Water Quality) to ensure that substantial erosion would not occur during construction and operation of the project. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-3:	**Both Project Options:** The project (under either option) would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Same Impact as Approved Project [Less than Significant Impact])**

Given the proximity (within nine miles) of seismically active faults to the project site, seismic ground shaking could result in liquefaction, liquefaction-induced lateral spreading, or differential settlement. Furthermore, undocumented fill is present in the project site due to the existing developments. Undocumented fill could potentially settle and cause distress to new structures and other improvements proposed by future projects. Implementation of the standard condition of approval discussed under Impact GEO-1 would reduce the impacts of seismic-related hazards to a less than significant level by preparing a design-level geotechnical investigation and implementing the recommendations in the report to properly design and engineer the project to prevent seismic and seismic related hazards (including liquefaction) and addresses undocumented fill on-site. Furthermore, the project site does not contain steep slopes subject to landslide potential.

Valley Water actively monitors for land subsidence through surveying, groundwater elevation monitoring, and data from compaction wells. Valley Water reduces the potential for land subsidence

throughout the Santa Clara Valley by recharging groundwater basins with local and imported surface water. The project (under either option) would develop urban uses connected to the City's water system and would not require permanent groundwater extraction wells on-site. As noted in Section 5.9 Hydrology, the project would require temporary groundwater dewatering during construction. According to a Preliminary Geotechnical Investigation prepared for the project, groundwater would be extracted at a rate of approximately 40 to 80 gallons per minute, or 57,600 to 115,200 gallons per day during construction until building foundations are completed.[123] The standard condition of approval above (COA GEO-1.1) includes evaluation and implementation of measures to minimize dewatering during construction, which would prevent subsidence from the temporary construction dewatering. No permanent dewatering is required for the project. For this reason, the project (under either option) is expected to have a less than significant impact on subsidence.

The project (under either option) would comply with Cal/OSHA requirements that minimize the potential for instability and collapse.

Based on the above discussion, the project would have less than significant impacts related to on- or off-site landslide, lateral spreading, subsidence, or liquefaction from on-site conditions. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-4:	**Both Project Options:** The project (under either option) would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Same Impact as Approved Project [Less than Significant Impact])**

Soils with medium expansion potential occur on the project site, which can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. The implementation of the standard condition of approval discussed under Impact GEO-1 would reduce impacts of expansive soils to a less than significant level by properly designing and engineering the project to address effects from expansive soils. Therefore, the project (under either option) would result in a less than significant impact from expansive soil and would not create substantial direct or indirect risks to life or property. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[123] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2.* January 29, 2021. Revised February 8, 2021. P. 24.

Impact GEO-5:	**Both Project Options:** The project (under either option) would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(Same Impact as Approved Project [Less than Significant Impact])**

Project

The project would connect to the City's existing sanitary sewer system. The project would not require septic tanks or alternative wastewater disposal systems. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

The project with District Utilities System Option includes a CUP, which includes a wastewater treatment plant that would have the capacity to treat a portion of the daily wastewater generated by the project. The remaining wastewater generated by the project above the treatment capacity of the CUP would be treated at the PARWQCP. The design-level geotechnical report for the project discussed under Impact GEO-1 would evaluate the CUP and identify recommendations to ensure on-site soils conditions are adequate to support the development. No leach pits or percolation fields are proposed. Therefore, the project with District Utilities System Option would not result in soils impacts due to the installation of septic tanks or alternative wastewater disposal systems. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-6:	**Both Project Options:** The project (under either option) would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Same Impact as Approved Project [Less than Significant Impact)]**

Although the likelihood of encountering buried paleontological resources is low, the disturbance of these resources (if on-site) during construction and excavation could result in an impact to unknown resources. The Precise Plan EIR included the following standard condition of approval to reduce impacts to unknown paleontological resources to a less than significant level.

Standard Condition of Approval:

COA GEO-2.1: **Both Project Options: Discovery of Paleontological Resources**. In the event a fossil is discovered during construction of the project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The City shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards.

With implementation of the above standard condition of approval, the project (under either option) would result in less than significant impacts to paleontological resources by ensuring any unburied paleontological resources are properly recovered and minimizing disturbance during excavation and construction. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.6.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEO-1:	**Both Project Options:** The project (under either option) would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.	Yes	LTS	None	N/A
GEO-2:	**Both Project Options:** The project (under either option) would not result in substantial soil erosion or the loss of topsoil.	Yes	LTS	None	N/A
GEO-3:	**Both Project Options:** The project (under either option) would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Yes	LTS	None	N/A
GEO-4:	**Both Project Options:** The project (under either option) would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property.	Yes	LTS	None	N/A
GEO-5:	**Both Project Options:** The project (under either option) would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEO-6:	**Both Project Options:** The project (under either option) would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant

5.7 GREENHOUSE GAS EMISSIONS

5.7.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for GHGs has not substantially changed since the certification of the Precise Plan EIR.

5.7.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Refer to the Precise Plan EIR for additional background information.

5.7.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying EO B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (CO_2e) ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area is discussed further under Regional and Local plans below.

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to LOS for evaluating transportation impacts, specifically VMT. SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts to encourage infill development and a diversity of uses instead of sprawl, promote multi-modal transportation networks, and thereby reduce greenhouse gas emissions.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures. BAAQMD is currently updating the existing CEQA Guidelines and GHG thresholds of significance. The new significance threshold is anticipated to be considered for adoption in Spring 2022.

Plan Bay Area 2040/2050

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended to support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified PDAs.[124]

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

In October 2021, ABAG adopted Plan Bay Area 2050 which includes 35 strategies for housing, transportation, economic viability and the environment and lays out a vision for policies and investments to make the bay area more affordable, connected, diverse, healthy and economically vibrant. It will take several years for the updated plan to be reflected in the regional and county-wide transportation models, so land uses and development projections based on Plan Bay Area 2040 are

[124] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed September 24, 2021.

used as the foundation for this analysis.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to greenhouse gas emissions impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 12.1	**Emissions reduction target.** Maintain a GHG emissions reduction target.
INC 12.2	**Emissions reduction strategies.** Develop cost-effective strategies for reducing GHG emissions.
INC 12.3	**Adaptation strategies.** Develop strategies for adapting to climate change in partnership with local and regional agencies.
Land Use and Design	

Source: City of Mountain View, *Mountain View 2030 General Plan,* July 10, 2012. Pp. 133-134, 59-60

2030 Greenhouse Gas Reduction Program

The City of Mountain View certified the General Plan Program EIR (SCH #2011012069) and adopted the Mountain View 2030 General Plan and Greenhouse Gas Reduction Program (GGRP) in July 2012. The GGRP is a separate but complementary document to the General Plan that implements the long-range GHG emissions reduction goals of the General Plan and serves as a programmatic GHG reduction strategy for CEQA tiering purposes. The GGRP includes goals, policies, performance standards, and implementation measures for achieving GHG emissions reductions, to meet the requirements of AB 32. The program includes a goal to improve communitywide emissions efficiency by 15 to 20 percent over 2005 levels by 2020 and by 30 percent over 2005 levels by 2030.

Climate Protection Roadmap

The City's Climate Protection Roadmap (CPR), completed in 2015, presents a projection of GHG emissions through 2050 and several strategies that would help the City reduce absolute communitywide GHG emissions to 80 percent below 2005 levels by 2050.

Reach Building Code

In 2019, the Mountain View City Council approved amendments to Chapters 8, 14, and 24 of the City of Mountain View Green Building Code, referred to as Reach Code amendments. The Reach Code amendments are applicable to any project submitted to the City after December 31, 2019. As noted in Section 5.5 Energy above, these Reach Code amendments require new buildings to be all-electric with an exception of commercial spaces with specialized equipment that cannot operate with electric service if approved by the City.

California Transportation Plan 2050

The California Transportation Plan 2050 (CTP 2050) defines performance-based goals, policies, and strategies to achieve the state's collective vision for California's future statewide, integrated, multimodal transportation system. The CTP 2050 includes goals for achieving statewide GHG emissions reduction targets, improving multimodal mobility and access to destinations, maintaining a high-quality transportation system, and expanding protection of natural resources.

1.1.1.3 *Existing Conditions*

The Precise Plan area and the project site (located within a designated PDA)[125] is developed primarily with office, light industrial, and R&D uses. These uses currently generate direct GHG emissions from the vehicle trips of employees and visitors, natural gas used for cooking and building heating, operation of stationary equipment (such as back-up generators), and indirect GHG emissions from operational electricity, water use, and other sources.

5.7.2 Impact Discussion

For the purpose of determining the significance of the project's impact on greenhouse gas emissions, would the project:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

1.1.1.4 *Project Impacts*

Impact GHG-1:	**Both Project Options:** The project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Same Impact as Approved Project [Less than Significant Impact])**

As disclosed in the Precise Plan EIR, the implementation of the Precise Plan (which includes the project under either option) is estimated to generate 90,427 $MTCO_2e$ annually[126]. The project's portion of the total Precise Plan GHG emissions is approximately 15,900 $MTCO_2e$.[127] The Precise Plan EIR concluded that implementation of the Precise Plan (which includes the project under either option) would not exceed the City's GGRP 2030 threshold of 4.5 $MTCO^2e$/year/service population. As a result, the Precise Plan concluded that GHG emissions from implementation of the Precise Plan (which

[125] Metropolitan Transportation Commission. *Priority Development Areas (Plan Bay Area 2050).* Map. July 2020. https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2050/explore?location=38.618077%2C-121.005390%2C6.90

[126] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 98.

[127] Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

includes the project under either option), would not result in significant GHG emissions.[128] If evaluated independently, the project (under either option) would result in GHG emissions of 1.82 MTCO2e/year/service population.[129] Consistent with the analysis in the Precise Plan EIR, the project would:

- Be consistent with the 2017 CAP goals;
- Be consistent with the most recent Title 24 building standards for energy efficiency,
- Participate in SVCE's 100 percent carbon-free electricity (or purchase energy contracts from PG&E for carbon-free electricity);
- Be located in a PDA identified in Plan Bay Area;
- Implement a trip cap for office uses and a TDM program including TMA membership for all other proposed commercial and residential uses, consistent with the City of Mountain View Greenhouse Gas Reduction Program and Precise Plan; and
- Incorporate multi-modal transportation improvements on-site and on adjacent City streets to accommodate and encourage non-automobile transportation modes, consistent with the California Transportation Plan 2040.

For the reasons listed above, the project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GHG-2:	**Both Project Options:** The project (under either option) would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that implementation of the Precise Plan would not conflict with plans, policies, or regulations for reducing GHG emissions, including the 2017 CAP, Plan Bay Area, GGRP, and California Transportation Plan 2040. The Precise Plan would increase development within a PDA identified in Plan Bay Area (as discussed in Section 4.1 Air Quality) and includes policies and requirements for existing and future development within the Precise Plan area to reduce GHG emissions from building operations and vehicle trips such as:

- A trip cap for office uses;
- TDM requirements for commercial and residential development;
- Requirements for projects requesting Bonus FAR to achieve a design intent of LEED Platinum, 120 Green Point Rated points, or equivalent; and
- Include multi-modal transportation improvements to further reduce VMT by encouraging

[128] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 96 – 98.

[129] Service population estimated as a percent of EWPP development. The project proposes 38 percent of residential units, 31.6 percent of net new square feet of office uses, and 50 percent of net new neighborhood commercial uses identified in the approved Precise Plan for a total of 4,803 new residents and 3,929 new employees. 15,900 $MTCO^2e$/year / 8,732 service population = 1.82 $MTCO_2e$/year/service population. Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

mode shifts toward active transportation modes, thereby reducing GHG emissions from vehicle traffic.

Therefore, it was concluded in the Precise Plan EIR that implementation of the Precise Plan (which includes the project under either option) would not conflict with plans, policies, or regulations for reducing GHG emissions.[130] Because development analyzed in the Precise Plan EIR includes the proposed MPMP, the project (under either option) would result in the same less than significant impact with regard to consistency with GHG reduction plans, policies, and regulations as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

5.7.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GHG-1:	**Both Project Options:** The project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Yes	LTS	None	N/A
GHG-2:	**Both Project Options:** The project (under either option) would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant					

[130] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp. 98–100.

5.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on hazards and hazardous materials reports completed by Iris Environmental dated 2014 and 2016 IVI Assessment dated May 16 and 17, 2013; EMG dated September 23, 2015, Elevate Environmental dated February 21, 2021; and Cornerstone Earth Group dated August 27, 2021. These reports are included in Appendix F.

5.8.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for hazards and hazardous materials has not substantially changed since the certification of the Precise Plan EIR.

5.8.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous

substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[131]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[132]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[133]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara County Department of Environmental Health reviews CalARP

[131] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 11, 2020. https://www.epa.gov/superfund/superfund-cercla-overview.
[132] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[133] California Environmental Protection Agency. "Cortese List Data Resources." Accessed September 8, 2021. https://calepa.ca.gov/sitecleanup/corteselist/.

risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

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

Regional and Local

Municipal Regional Permit Provision C.12.f

PCBs were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems.[134] As of July 2019, all applicants proposing full demolition of a building are required to submit a PCB Screening Assessment Applicant Package prior to obtaining a demolition permit. Buildings constructed or remodeled between 1950 and 1980 may contain PCBs in building materials. Implementation of this requirement is required in the San Francisco Bay Regional Stormwater NPDES Permit (Order No. r2-2015-0049, Permit No. CAS612008).[135]

The RWQCB has drafted a renewed MRP for the San Francisco Bay Region, which is anticipated to be adopted by the Water Board in May 2022. If adopted, any new development submitted to the City

[134] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.
[135] City of Mountain View. "Environmental Projection." Accessed November 18, 2021. https://www.mountainview.gov/depts/fire/environment/protection.asp

after its effective date will be subject to the regulations under the renewed MRP.[136]

Moffett Federal Airfield Comprehensive Land Use Plan (CLUP)

As previously mentioned, FAR Part 77 requires the FAA be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. For the project site, any structure exceeding 182 feet in height above mean sea level (amsl) would require submittal to the FAA for airspace safety review. The project site has an elevation ranging from 62 amsl in the southeast corner of the site to 50 feet amsl in the northwest corner. In addition to height, the Moffett Field CLUP restricts land use and density per acre within turning safety zones.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to hazards and hazardous materials. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 3.2	**Protection from hazardous materials.** Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials through prevention and enforcement of fire and life safety codes and prevention.
PSA 3.3	**Development review.** Implement development review procedures that encourage effective identification and remediation of contamination and protection of public and environmental health and safety.
PSA 3.4	**Oversight agencies.** Work with local, state and federal oversight agencies to encourage remediation of contamination and protection of public and environmental health and safety.
Infrastructure and Conservation	
INC 18.1	**Contamination prevention.** Protect human and environmental health from environmental contamination.
INC 18.2	**Contamination clean-up.** Cooperate with local, state, and federal agencies that oversee environmental contamination and clean-up.
Land Use and Design	
LUD 3.10	**Zoning standards for sensitive uses.** Allow sensitive uses such as childcare in the North Bayshore and East Whisman Change Areas with measures to protect those uses from hazardous materials used by surrounding businesses.

Source: City of Mountain View, *Mountain View 2030 General Plan,* July 10, 2012. P. 177, 136, 49

[136] California Water Boards, San Francisco Bay, Stormwater Municipal Regional Stormwater NPDES Permit Reissuance: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/. Accessed on April 8, 2022.

5.8.1.2 *Existing Conditions*

Project Site

According to the Precise Plan EIR, the Middlefield–Ellis-Whisman (MEW) Superfund Study Area and various other Leaking Underground Storage Tank (LUST) and spills, leaks, investigations, and cleanup (SLIC) sites (including those on lists compiled pursuant to Government Code Section 65962.5) are located within the Precise Plan area. There are also several contaminated sites located just outside the Precise Plan area whose contamination has migrated within the Precise Plan boundaries.

Middlefield-Ellis-Whisman Superfund Study Area

The project site is located within the MEW Superfund Study Area, an area designated by the EPA as a Superfund site due to the presence of soil and groundwater contaminated by Volatile Organic Compounds (VOCs).[137] As a result, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5.

Prior to 1962, the project site (and many surrounding areas throughout the Precise Plan area) were used for agricultural purposes or left as vacant lands. From the mid-1960s through the early 2000s, the project site was developed with commercial and industrial/R&D buildings. Due to the historic uses of the site for agricultural and industrial/R&D purposes, the Phase I Environmental Site Assessments (ESAs) prepared for the project determined on-site soils and groundwater may be impacted and recommended a Phase II subsurface investigation be completed. A summary of the Phase I ESA findings is shown in Table 5.8-1 below.

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings

Address	On-site Contamination[1]	Depth to Groundwater (feet)	Year Buildings Constructed
401 Ellis Street	• Middlefield Ellis Whisman Groundwater Plume	10 to 15	1997
440 Logue Avenue	• MEW Groundwater Plume • Groundwater monitoring well R43A • Listed in the Leaking Underground Storage Tank, Hist Leaking Underground Storage Tank, CA FID, Underground Storage Tank, Cortese, and Sweeps Underground Storage Tank databases for gasoline release in soils in 1998. Cleanup completed and case has been closed.	6 to 14	1991
441 Logue Avenue	• Leaking Underground Storage Tank site with residual hydrocarbons present in soils and groundwater above commercial Regional Water Quality Control Board screening levels. This case has been closed. • Former Southern Pacific Rail Sur located along	10 to 11.5	2005

[137] Lee, Alana. U.S. Environmental Protection Agency. Person Communication. November 24, 2021.

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings			
Address	**On-site Contamination[1]**	**Depth to Groundwater (feet)**	**Year Buildings Constructed**
	northern project boundary		
500 Logue Avenue	• Within 2,000 feet of Middlefield Ellis Whisman Groundwater Plume • Volatile Organic Compounds in soil and groundwater on-site • Groundwater contamination plume migrated under the site • Subject to development restrictions as a Border Zone property • Above ground fuel storage tanks associated with existing emergency generators • Two groundwater monitoring wells located on eastern portion of the site	10 to 15	1974
405 Clyde Avenue	None	10	1973
420 Clyde Avenue	None	10 to 40	1975 to 1981
433 Clyde Avenue	• Limited localized Tichloroethylene plume likely present due to releases associated with historic drum storage on east side of site.	19	1973
440 Clyde Avenue	• Two aboveground perchloroethylene (PCE) tanks were formerly located on-site and used for bulk storage of PCE for off-site distribution. PCE has been detected in on-site soils and groundwater near the former PCE tanks. A letter from the RWQCB to the site owner stated that no further action related to the pollutant release at the site was required and attributed some, if not all of the PCE impacts in groundwater to off-site sources.	10	1968
485 Clyde Avenue	• Historic use of trichloroethylene (TCE) on-site has been documented and TCE and other volatile organic compounds (VOC) impacts to soil and groundwater have been detected during closure of clarifiers and a hot gas filtration pit. The concentration of VOCs in soil samples were below corresponding ESLs. A no further action letter issued by RWCQB attributes the groundwater impacts to likely offsite contamination and states that RWCQB will not pursue enforcement action against current or future property owners.	20	1974
850 – 840 Maude Avenue	• One above ground diesel storage tank and generators currently on-site	12.7	1973

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings			
Address	**On-site Contamination[1]**	**Depth to Groundwater (feet)**	**Year Buildings Constructed**
880 Maude Avenue	• HP and E/M Lubricant groundwater plume present • Groundwater impacted by VOCs, primarily Tichloroethylene and Perchloroethylene • An on-site release of PCE and/or TCE may have occurred on-site based on the presence of concrete sump. This sump is of potential concern because: 1) sumps are frequently significant chlorinated solvent release points, and 2) the groundwater data suggests the sources of the potential on-site release might be located approximately where the sump was last seen.	15 to 45	1968
885 Maude Avenue	None	11	1962 to 1968
891 Maude Avenue	None	12	1981

[1] Contamination related to the regional groundwater plumes (MEW and HP and E/M Lubricants may be present on portions of the project site, however, do not originate on-site.

Source: IVI Assessment Services, Inc. *Phase I Environmental Site Assessment, Mountain View Gateway 401 Ellis Street and 500 E. Middlefield Road, Mountain View, California.* May 16, 2013. Iris Environmental. *Phase I Environmental Site Assessment 405 Clyde Avenue, Mountain View, California.* April 18, 2014. EMG. *Phase I Environmental Site Assessment of 420 Clyde Avenue, Mountain View, California 94043.* September 23, 2015. Iris Environmental. *Phase I Environmental Site Assessment 433 Clyde Avenue, Mountain View, California.* October 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment 440 Clyde Avenue Mountain View, California.* February 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment, 440 Logue Avenue, Mountain View, California.* June 9, 2014. Iris Environmental. *Phase I Environmental Site Assessment 441 Logue Avenue, Mountain View California.* February 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment 485 & 495 Clyde Avenue, Mountain View, California.* May 17, 2013. Northgate Environmental Management, Inc. *Phase I Environmental Site Assessment Update, Mountain View Technology Park, Mountain View, California.* November 19, 2007. Iris Environmental. *Phase I Environmental Site Assessment, 800, 830, and 840-850 Maude Avenue, Mountain View, California.* October 22, 2014. Iris Environmental. *Phase I Environmental Site Assessment, 880 Maude Avenue and 420 Clyde Avenue.* April 18, 2016. Iris Environmental. *Phase I Environmental Site Assessment, 885-889 Maude Avenue, Mountain View, California. July 3, 2014.* Iris Environmental. *Phase I Environmental Site Assessment, 891 Maude Avenue, Mountain View, California.* May 19, 2014.

A Phase II Subsurface Investigation was completed for the project site by Elevate Environmental Consulting in February 2021. According to this report, portions of the site are located within the HP and E/M Lubricant Plume, which is impacted by VOC, primarily TCE and perchloroethylene (PCE). The site is also located adjacent and cross-gradient from the MEW plume which is impacted by TCE. Based on recent monitoring data, the MEW plume has encroached into the western edge of the project site.

No existing underground storage tanks were identified on-site as of the date of the Phase II. Two groundwater monitoring wells associated with ongoing monitoring of the MEW plume are present on-site and two are located adjacent to the site boundary, east of 440 Logue Avenue. The EPA has claimed oversight over the Master Plan area.

On-site soils, groundwater, and soil vapors were tested for presence of VOCs, total petroleum hydrocarbons (TPHs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), TCE, chloroform, metals, and asbestos. Table 5.8-2 summarizes the contaminant concentrations detected compared to their respective Environmental Screening Levels (ELS). Refer to Appendix F for details.

Table 5.8-2: Phase II Subsurface Investigation Sampling Results and Environmental Safety Levels

Media Sampled	Contaminant	Sampling Result	Environmental Safety Levels	Exceed Environmental Safety Levels?
Soil	Arsenic	1.5 to 12 mg/kg*	0.067 mg/kg	Yes
	Barium	120 to 710 mg/kg**	390 mg/kg	Yes
	Cobalt	10 to 31 mg/kg**	23 mg/kg	Yes
	Nickel	52-240 mg/kg*	86 mg/kg	Yes
	Vanadium	50-160 mg/kg*	18 mg/kg	Yes
	Pentachlorophenol	<0.0099 to 0.017 J mg/kg	0.013 mg/kg	Yes
	Phenol	<0.0050 to 0.38 mg/kg	0.16 mg/kg	Yes
Groundwater	Chloroform	<0.052 to2.4 µg/L	0.81 µg/L	Yes
	1,2 Dichloroethane	<0.0075 to 2.9 µg/L	0.50 µg/L	Yes
	PCE	<0.16 to 5.7 µg/L	14 µg/L	No
	TCE	<0.051 to 39 µg/L	1.2 µg/L	Yes
Soil Vapor	PCE	<1.36 to 13,000 $\mu g/m^3$	460 $\mu g/m^3$	Yes
	TCE	0.054 J to 5,100 $\mu g/m^3$	16 $\mu g/m^3$	Yes
	Chloroform	<1.6 to 29.5 $\mu g/m^3$	4.1 $\mu g/m^3$	Yes
	1,1-dichloroethane	<0.13 to 130 $\mu g/m^3$	2,400 $\mu g/m^3$	No
	1,2-dichloroethane	<0.21 to 4.1 $\mu g/m^3$	3.6 $\mu g/m^3$	Yes
	Vinyl chloride	<0.0511 to 3.73	0.32 $\mu g/m^3$	Yes

Table 5.8-2: Phase II Subsurface Investigation Sampling Results and Environmental Safety Levels				
Media Sampled	**Contaminant**	**Sampling Result**	**Environmental Safety Levels**	**Exceed Environmental Safety Levels?**
		µg/m^3		
Notes: *within range of regional background concentrations ** calculated 95 percent upper confidence limit (UCL) is below applicable ESL				

As shown in Table 5.8-2, soil samples were found to be either below residential direct contact ESL or within the range of regional background concentrations.[138] Groundwater samples were compared to RWQCB Tier 1 Groundwater ESLs and Groundwater Vapor Intrusion Human Health Risk Screening Levels for Residential and Commercial/industrial exposure scenarios. Groundwater samples contained chloroform, dichloroethane, PCE, TCE, and TPH-diesel above ESL, suggesting the HP and E/M Lubricant Plume is present in groundwater and is impacting soil vapor in the eastern half of the site. The MEW plume is also impacting groundwater and soil vapor on the western edge of the site.

Other Hazards

The Moffett Federal Airfield is located approximately 0.5-mile northwest of the project site. The project site, along with most of the Precise Plan area is located within the Airport Influence Area and within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. The elevation of the project site ranges from 50 to 62 feet amsl and the proposed project would have a maximum height of 16 to 125 feet above grade, therefore, the proposed buildings would be reviewed for consistency with the 182-foot amsl threshold and, depending on the amsl at the building location, may require consultation with the FAA to determine if the project would create an avian hazard.[139] Additionally, as identified in the Precise Plan, an avigation easement may be recorded on sites with new buildings as required by the Moffett CLUP.

Nearby Schools and Childcare Facilities

Schools and childcare facilities in the project area include the Google Children's Center - The Woods day care facility located at 325 Gladys Avenue and Jose Antonio Vargas Elementary school located are 220 North Whisman Road, both of which are located 0.38 miles southwest of the project site.

[138] Due to the widespread presence of certain contaminants in soils throughout the region, sampling results found to be consistent with regional background conditions indicate contaminant concentrations are not unique to the site and cannot be attributed to a specific release.

[139] Santa Clara County, Airport Land Use Commission. November 18, 2016. *Comprehensive Land Use Plan: Moffett Federal Airfield.* Accessed November 16, 2021. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/ALUC_NUQ_CLUP.pdf

5.8.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hazards and hazardous materials, would the project:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
2) 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?
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4) 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?
5) 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, result in a safety hazard or excessive noise for people residing or working in the project area?
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

5.8.2.1 *Project Impacts*

Impact HAZ-1:	**Both Project Options:** The project (under either option) would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Same Impact as Approved Project [Less than Significant Impact])**

Project

The Precise Plan EIR concluded that, with compliance with federal, state, and local requirements, and General Plan policies, future development (including the project) would not create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials. The conditions in and around the project site have not changed substantially since the certification of the Precise Plan EIR and the project proposes land uses consistent with those identified for the site and previously analyzed in the Precise Plan EIR. For these reasons, the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact[140]])**

[140] Ibid. P. 119.

Emergency Generators

The project (under either option) would include 11 diesel-powered emergency generators within the basements of Buildings R1 through R3, R4, R4 AFF, R5, R6 AFF and O1 through O5. Diesel fuel for these generators would be stored in double-walled aboveground storage tanks with each generator screened from visibility. Based on the number and horsepower of generators proposed, it is estimated that approximately 6,600 gallons of diesel fuel would be stored on-site.

Cooling Towers

The project (under either option) would include cooling towers associated with building and heating cooling equipment. Operation of cooling towers would involve the transport, use, storage, and disposal of hazardous materials, including chemicals intended to inhibit the formation of scale and corrosion, and to reduce bacteria, fungus, and algae growth within cooling towers such as microbiocide containing Dibromocyaneoacetamide, liquid bromine oxidizing biocide containing sodium bromosulfamate, liquid scale and corrosion inhibitor contain etidronic acid, phosphonic acid, and other constituents, and a liquid isothiazole based biocide. These chemicals would be stored in drums ranging from approximately 10 to 55 gallons in size.

Project with District Utilities System Option

The project with District Utilities System Option would result in the same impact as described above for the project without a district utilities system, as the District Utility Systems Option would include the equipment and hazardous materials identified above, with the addition of a CUP including an on-site wastewater treatment facility that would use, store, and generate hazardous materials.

On-site Wastewater Treatment Facility

Operation of the on-site wastewater treatment facility would involve the transport, use, storage, and disposal of hazardous materials, including chemicals intended to inhibit the formation of scale and corrosion, and to reduce bacteria, fungus, and algae growth within cooling towers, such as microbiocide containing dibromocyaneoacetamide, liquid bromine oxidizing biocide containing sodium bromosulfamate, liquid scale and corrosion inhibitor contain etidronic acid, phosphonic acid, and other constituents, and a liquid isothiazole based biocide.[141] These chemicals would be stored in drums within the CUP ranging from approximately 10 to 55 gallons in size.[142] Additionally, operation of the wastewater treatment facility would require use and storage of cleaning chemicals on-site such as citric acid, sodium hypochlorite, methanol, sodium bicarbonate, polymers, and ferric chloride. These chemicals would also be stored in 55-gallon drums within the CUP.[143]

Ozone (O_3) is often used in water disinfection processes for recycled water as O_3 molecules combine with other materials in water, making it easier to extract the unwanted materials from the water.[144] Because O_3 is unstable and decomposes to elemental oxygen in a short amount of time, O_3 must be

[141] Cornerstone Earth Group. *Chemical Use Summary Middlefield Park Master Plan District Systems Mountain View, California.* August 27, 2021.
[142] Ibid.
[143] Ibid.
[144] United States Environmental Protection Agency. *Wastewater Technology Fact Sheet, Ozone Disinfection.* September 1999. https://www3.epa.gov/npdes/pubs/ozon.pdf

generated close to where it is intended to be used. Thus, O_3 generation equipment may be required to ensure that O_3 is available for use at the proposed wastewater treatment plant.[145] O_3 generated on-site would be injected into the water, creating bubbles and off-gasses. Any remaining O_3 in off-gasses should be destroyed before it is released into the atmosphere. If O_3 is used in the on-site wastewater treatment facility, any unused O_3 off-gasses would be required to be sent to an integrated O_3 destruction unit within the CUP to be recycled.

Microgrid

As discussed in Section 3.2.5 Microgrid System, on-site batteries and battery storage units would be located within the CUP either in the basement of Building O1 or in an enclosure adjacent to the building at grade. Battery units include coolant, refrigerant, and electrolytes. Based on the size and number of battery units proposed, a total of 725 gallons of coolant and 84 pounds of refrigerant would be stored on-site within the batteries.[146] Additionally, each battery unit would contain electrolytes which include volatile hydrocarbon-based liquid and a dissolved lithium salt such as lithium hexafluorophosphate. The electrolyte reacts with those materials and is consumed during normal operation of the batteries. As a result, there are very little to no liquid electrolytes present within batteries once they are operational.[147]

The battery storage units would be equipped with electronic monitoring devices to detect a coolant system failure and auto shutdown in the event of internal leaks or thermal runaway.[148] In addition, the equipment cabinets, where the battery units would be stored, would provide protection against environmental, chemical, and physical exposures.[149] The location in which batteries are stored, the design of fire suppression systems, and any required additional secondary containment catchment basins would be reviewed and approved by the City of Mountain View Fire Department (MVFD) prior to issuance of building permits.

The transport, storage, use and disposal of these chemicals would be conducted in accordance with local, state, and federal laws and regulations including Cal/OSHA regulations for construction activities, RCRA requirements for disposal of solid waste and hazardous materials, and TSCA requirements for reporting, record-keeping, and testing related to chemical substances and/or mixtures. Operation in accordance with local, state, and federal laws would ensure that the transport, storage, use and disposal of chemicals associated with the district utilities system option would not create a significant hazard to the public or environment. **(Same Impact as Approved Project [Less than Significant Impact])**

[145] Cornerstone Earth Group. *Chemical Use Summary Middlefield Park Master Plan District Systems Mountain View, California.* August 27, 2021.
[146] Ibid.
[147] Ibid.
[148] Ibid.
[149] Ibid.

Impact HAZ-2:	**Both Project Options**: The project (under either option) 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. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**

Project

On-Site Soil and Groundwater Contamination

According to the Precise Plan EIR, future development projects within the MEW Superfund Study Area would be subject to the EPA's Record of Decision (ROD) Amendment for the Vapor Intrusion Pathway, MEW Superfund Study Area[150]; and, the Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area.[151] Furthermore, all future development would be required to prepare and submit an air monitoring plan, vapor intrusion control system remedial design plan, and additional requirements as needed by the EPA for review and approval and by the City for review (refer to the Precise Plan EIR for details). The Precise Plan EIR identified a potentially significant hazardous materials impact (Impact HAZ-3) from construction activities associated with development on sites with contaminated soils and groundwater in the Precise Plan area.[152]

As noted in Section 5.8.1 Environmental Setting, portions of the project site are located within the HP and E/M Lubricant Plume and within the MEW plume. On-site soil contaminants are below the residential ESLs or within regional background concentrations.[153] On-site groundwater and soil vapor are impacted by the HP and E/M Lubricant and MEW plumes. There are also two groundwater monitoring wells associated with ongoing monitoring of the MEW plume present on-site. As a result, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5.

The project site is located within the MEW Superfund Study Area and groundwater contamination and soil vapor levels on-site are similar to other sites within the MEW Superfund Study Area. Therefore, the project would have the same impacts as disclosed in the Precise Plan EIR for sites within the MEW Superfund Study Area and would be required to comply with the following EPA-required ROD measures described in the Precise Plan EIR to minimize potential impacts associated with the contaminated groundwater and soil vapor on the project site during project construction and operation.

1) For future/new buildings on property where lines of evidence indicate that there is the potential for vapor intrusion into the new building above EPA's indoor air cleanup levels, the remedy shall

[150] U.S. Environmental Protection Agency. *Middlefield-Ellis-Whisman (MEW) Superfund Study Area, Mountain View and Moffett Field, California*. August 16, 2010.
[151] U.S. Environmental Protection Agency. *Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area.* 2011.
[152] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 118 – 119.
[153] Due to the widespread presence of certain contaminants in soils throughout the region, sampling results found to be consistent with regional background conditions indicate contaminant concentrations are not unique to the site and cannot be attributed to a specific release.

consist of 1) passive sub-slab ventilation with a vapor barrier (and with the ability to convert the system from passive to active ventilation), 2) monitoring to ensure the long-term effectiveness, and 3) the implementation of Institutional Controls.

2) For future/new buildings on properties where multiple lines of evidence indicate there is no potential for vapor intrusion into the building exceeding EPA's indoor air cleanup levels, indoor air sampling shall be performed after the building is constructed to confirm that there is no potential vapor intrusion risk and EPA's indoor air cleanup levels are met; if approved by the EPA, no further vapor mitigation actions are required.
3) At properties where a vapor intrusion remedy is determined to be required, future project developers would be required to submit the following plans and controls to EPA for review and approval and would be required to implement the EPA-approved measures.

    a) The Air Monitoring Plan assesses the exposure of construction workers and neighboring occupants adjoining the property to VOCs as part of the Air Monitoring Plan; this plan shall specify measures to be implemented if VOCs exceed regulatory threshold values.
    b) The Vapor Intrusion Control System Remedial Design describes the measures to be implemented to help prevent exposure of property occupants to VOCs in indoor air as a result of vapor intrusion. A Vapor Intrusion Mitigation Plan must be prepared, which requires future project developers to design the proposed occupied spaces with appropriate structural and engineering features to reduce risk of vapor intrusion into buildings. At a minimum, this design would include incorporation of vapor barrier and provisions of space to accommodate active ventilation equipment to help prevent indoor air contaminant concentrations exceeding EPA's indoor air cleanup levels. Future project developers would be required to submit the vapor intrusion remedial design (including the Vapor Intrusion Mitigation Plan) to the EPA for review and approval.

4) The ROD Amendment for the Vapor Intrusion Pathway, MEW Superfund Study Area (EPA 2010), and the Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area (EPA 2011) specify the selected remedy for all future buildings as: 1) passive sub-slab ventilation with a vapor barrier (and with the ability to convert the system from passive to active ventilation), 2) monitoring to ensure the long-term effectiveness) except where multiple lines of evidence show that there is no potential for vapor intrusion into a particular building exceeding indoor air cleanup levels, 2) monitoring to ensure the long-term effectiveness of the remedy, and 3) the implementation of institutional controls. Although active sub-slab/sub-membrane ventilation is considered to have a better long-term effectiveness than passive sub-slab ventilation systems, areas with lower groundwater VOC concentrations are considered to have a lower potential for vapor intrusion at levels exceeding indoor air cleanup levels. Because areas overlying higher VOC groundwater concentrations are considered to have a greater potential for vapor intrusion at levels exceeding indoor air cleanup levels, implementing an active sub-slab/sub-membrane ventilation system is acceptable because of its high rating in long-term effectiveness. Other design requirements would be subject to the EPA's determination of necessary measures based upon its Response Action Tiering System for future buildings.

    a) The Long-Term Operations, Maintenance, and Monitoring Plan shall describe actions to be taken following construction to maintain and monitor the vapor intrusion mitigation system as

well as a contingency plan should the vapor system fail.

b) The IC Implementation Plan shall describe non-engineered instruments of control, such as administrative and legal controls that help to minimize the potential for human exposure to contamination and/or protect the integrity of the response action. ICs shall be implemented through the City's planning and permitting procedures to ensure that the appropriate remedy is applied to particular building construction.
c) The Financial Assurance provides proof that adequate funds are available for long-term maintenance and monitoring of the vapor intrusion mitigation system.

Additionally, the Precise Plan includes mitigation measure EIR MM HAZ-3.1, requiring the preparation of a site-specific Phase I ESA and the preparation of a Site Management Plan (SMP) for all development projects with Recognized Environmental Conditions.

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM HAZ-3.1: Prior to the start of any redevelopment activity, a property-specific Phase I ESA shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents.

At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soils, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the project-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., EPA, RWQCB and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.

Consistent with Precise Plan EIR MM HAZ-3.1, Phase I ESAs have been prepared for the project site (refer to Appendix G). Pursuant to Precise Plan EIR MM HAZ-3.1, to protect construction workers and the environment, a SMP would be prepared and implemented.

With implementation of the vapor control measures and SMP described in Precise Plan EIR MM HAZ-3.1 above, impacts associated with hazardous materials would be less than significant because contaminated soil, groundwater, and soil vapor would be properly managed and remediated during project construction and operation. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Asbestos Containing Materials

The Precise Plan EIR identified a less than significant impact from development and redevelopment of sites with existing buildings which may contain ACMs and lead-based paint with compliance with local, state, and federal laws including Cal/OSHA regulations for testing and abatement of ACMs and lead-based paint, and NESHAP requirements for removal of these materials.

Standard Condition of Approval:

COA HAZ-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Toxic Assessment.** A toxic assessment report shall be prepared and submitted as part of the building permit submittal. The applicant must demonstrate that hazardous materials do not exist on the site or that construction activities and the proposed use of this site are approved by: the City Fire Department (Fire and Environmental Protection Division); the State Department of Health Services; the Regional Water Quality Control Board; and any Federal agency with jurisdiction. No building permits will be issued until each agency and/or department with jurisdiction has released the site as clean or a site toxics mitigation plan has been approved.
- **Building Demolition PCB Control.** Nonwood-frame buildings constructed before 1981 that will be completely demolished are required to conduct representative sampling of priority building materials that may contain polychlorinated biphenyls (PCBs). If sample results of one or more priority building materials show PCBs concentrations ≥50 ppm, the applicant is required to follow applicable Federal and State notification and abatement requirements prior to demolition of the building. Submit a completed "Polychlorinated Biphenyls (PCBs) Screening Assessment Applicant Package" with the building demolition plans for the project. A demolition permit will not be issued until the completed "PCBs Screening Assessment Applicant Package" is submitted and approved by the City Fire and Environmental Protection Division (FEPD). Applicants are required to comply with applicable Federal and State regulations regarding notification and abatement of PCBs-containing materials. Contact the City's FEPD at 650-903-6378 to obtain a copy of the "PCBs Screening Assessment Applicant Package" and related guidance and information.

The project site is currently developed with buildings that could contain lead-based paint and or asbestos-containing materials given their age. Consistent with the Precise Plan EIR and the City's standard conditions of approval, the project would comply with existing local, state, and federal regulations to address potential hazards from lead-based paint and asbestos-containing materials. For

these reasons, the project would result in the same less than significant impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

The project with the District Utilities System Option would result in the same less than significant impact with Precise Plan EIR MM HAZ-3.1 and COA HAZ-1.1 incorporated, as described above for the project without District Utilities System Option. Unlike the project, the project with District Utilities System Option would also include construction of a CUP, district distribution system, and geothermal system. Grading and excavation for the proposed CUP and district distribution system would result in the same potential hazards to the public and the environment related to impacted groundwater and soil vapor on-site as discussed above for the project. Construction of the geothermal system would require drilling up to 2,820 bores approximately 110 feet bgs.

As discussed in Section 4.10 Hydrology and Water Quality, the project site is underlain by two aquifers located between two and 60 feet bgs and between 55 and 160 feet bgs, respectively. The near surface aquifer is impacted by the HP and E/M Lubricant Plume and the MEW Plume, while the deeper aquifer is not impacted by these plumes. Thus, drilling for the geothermal bores would extend through the near surface aquifer and into a portion of the deeper aquifer. The geothermal bores would be drilled using the mud rotary drilling technique to prevent the potential spread of contamination from the shallow to deeper aquifers.[154] This technique involves advancing a hollow drill pipe into the ground and using a drill bit with water to simultaneously drill and remove the material while the drill pipe remains in place, creating a hollow bore. Once the bore hole has been drilled, a "u-loop" pipe would be inserted into the bore hole for the geothermal system and bentonite grout is poured around the "u-loop" pipe as the drill pipe is removed.[155] Therefore, although the bore would extend between the two aquifers, vertical cross contamination between the two aquifers would not occur because the drill pipe, and later the grout, would hold the space where soil once existed, preventing migration of groundwater along the vertical bore hole.[156] For these reasons, the District Utilities System Option would not result in any significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

[154] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021.
[155] Talon LPE. "Using mud rotary drilling for your next environmental drilling project." Accessed October 7, 2021. https://www.talonlpe.com/blog/why-choose-mud-rotary-drilling-for-your-environmental-drilling-project
[156] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021.

Impact HAZ-3:	**Both Project Options:** The project (under either option) would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Same Impact as Approved Project [Less than Significant Impact])**

There are no existing or proposed schools within 0.25-mile of the project site. The Google Children's Center – The Woods day care facility and Jose Antonio Vargas Elementary school are located 0.38 miles southwest of the project site. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HAZ-4:	**Both Project Options:** The project (under either option) is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; however, with implementation of mitigation measures, standard conditions of approval, and compliance with existing regulations, it would not create a significant hazard to the public or the environment. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

As noted in Section 5.8.1.2 Existing Conditions, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5. However, as discussed under Impact HAZ-2, the project (under either option) would not create a significant hazard to the public or environment with implementation of Precise Plan EIR MM HAZ-3.1, compliance with the ROD measures and regulations for testing, removal of ACMs, and the City's standard condition of approval COA HAZ-1.1. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact HAZ-5:	**Both Project Options:** The project (under either option) would be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. However, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Same Impact as Approved Project [Less than Significant Impact])**

FAR Part 77 sets forth standards and review requirements for protecting the airspace for safe aircraft operations, particularly by restricting density per acre, land use, and the height of potential structures and minimizing reflective surfaces, flashing lights, electronic interface and other potential hazards to aircraft in flight. These regulations require the FAA be notified of certain proposed construction projects located within an extended zone defined by a set of imaginary surfaces radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

The General Plan EIR concluded that construction equipment or future development that exceeds the height restrictions of FAR Part 77 or land use policies from Moffett Federal Airfield's Comprehensive Land Use Plan could affect navigable airspace; however, compliance with General Plan Policy LUD-

2.5 (which requires the City to evaluate land uses and development for consistency with safety, height, noise, and related policies of the CLUP for Moffett Federal Airfield), and FAA notification requirements (including preparation of an aeronautical study by FAA), as specified in FAR Part 77, would reduce potential impacts to a less than significant level.

The Precise Plan EIR concluded that development allowed under the Precise Plan would result in a less than significant hazard to airport operations with compliance with FAA notification requirements, and the Moffett Federal Airfield CLUP, as well as applicable General Plan policies and actions.

The nearest airport to the site is Moffett Federal Airfield, which is approximately 0.5-mile northwest of the site. According to the Moffett Federal Airfield Comprehensive Land Use Plan (CLUP), the project site is located within its Airport Influence Area.[157] A portion of the project site (495 Clyde Avenue, 485 Clyde Avenue, and 433 Clyde Avenue) is located within a turning safety zone of Moffett Federal Airfield.[158]

The project (under either option) is consistent with the land uses and density for the site as identified in the Precise Plan and as analyzed in the Precise Plan EIR. The portion of the site within the turning safety zone complies with the land use and density of 200 people per acre limits as established in the Moffett Field CLUP.[159] As noted in Section 5.8.1, Existing Conditions, the project site is located within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. The project (under either option) proposes buildings ranging from 16 to 125 feet in height on a site with an elevation that ranges from 50 to 62 feet amsl. The project would be designed to comply with the 182-foot amsl height threshold and, depending on the amsl of the building location, may be required to consult with the FAA and obtain a "Determination of No Hazard or Determination" of a "No Hazard with conditions" or a no hazard determination. Additionally, as identified in the Precise Plan, an avigation easement may be recorded on sites with new buildings as required by the Moffett CLUP. The project (under either option) would comply with FAA notification requirements, the Moffett Federal Airfield CLUP, and applicable General Plan policies and actions identified for development within the Precise Plan. Additionally, as discussed in detail in Section 5.12 Noise, the noise levels generated by the proposed land uses on-site would be acceptable for the uses proposed in relation to the Moffett CLUP. For these reasons, the project (under either option) would not expose people to a safety hazards or excessive noise from Airfield operations. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[157] County of Santa Clara. *Comprehensive Land Use Plan, Moffett Federal Airfield*. December 19, 2018.
[158] Santa Clara County Interactive Property Assessment GIS, February 4, 2022, https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=fb3af8ce73b6407c939e1ac5f092bb30
[159] Email correspondence from Santa Clara County Department of Planning and Development confirmed compliance. Received July 15, 2021.

Impact HAZ-6:	**Both Project Options:** The project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that development allowed under the Precise Plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the Precise Plan is consistent with General Plan Policies MOB 10.1, MOB 10.2, and MOB 10.4 which require efficient automobile infrastructure, implementation of TDM programs, and monitoring of emergency response times.[160]

The project (under either option) would include seven emergency access roads throughout the site (six new service streets and one emergency vehicle access road parallel to the VTA tracks) and would not interfere with an adopted Mountain View emergency response or evacuation plan because the project would incorporate relevant fire code requirements and is not located along specified evacuation or emergency routes such that an impact would occur. Additionally, as discussed in Section 5.16 Transportation, new private roads and improvements to existing public roads proposed as part of the project (under either option) would be constructed to meet City standards (including adequate widths and turning aisles for emergency access). For these reasons, the project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HAZ-7:	**Both Project Options:** The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(Same Impact as Approved Project [No Impact])**

The project site is located in an urbanized area and not adjacent to wildland areas; therefore, there would be no wildfire-related impact. Also refer to Section 5.19 Wildfire. This is the same impact as disclosed in the Precise Plan EIR.[161] **(Same Impact as Approved Project [No Impact])**

5.8.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-1:	**Both Project Options:** The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Yes	LTS	None	N/A

[160] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P 124.
[161] Ibid. P 125.

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-2:	**Both Project Options:** The project (under either option) would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	S	Precise Plan EIR MM-3.1	LTS
HAZ-3:	**Both Project Options:** The project (under either option) would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	LTS	None	N/A
HAZ-4:	**Both Project Options:** The project (under either option) is listed on a site compiled pursuant to Government Code section 65962.5; however, with implementation of mitigation measures, standard conditions of approval, and compliance with existing regulations, it would not create a significant hazard to the public or the environment.	Yes	S	Precise Plan EIR MM HAZ-3.1	LTS
HAZ-5:	**Both Project Options:** The project (under either option) located within an airport land use plan would not result in a safety hazard or excessive noise for people residing or working in the project area.	Yes	LTS	None	N/A
HAZ-6:	**Both Project Options:** The project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Yes	LTS	None	N/A
HAZ-7:	**Both Project Options:** The project (under either option) would not expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	Yes	NI	None	N/A
Abbreviations: LTS – Less than Significant, S – Significant, NI – No Impact.					

5.9 HYDROLOGY AND WATER QUALITY

5.9.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for hydrology and water quality has not substantially changed since the certification of the Precise Plan EIR.

5.9.1.1 *Regulatory Framework*

Federal and State

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

National Flood Insurance Program

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

Statewide Construction General Permit

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

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San

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

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo.[162] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

In May 2022, it is anticipated the RWQCB will consider adoption of a renewed MRP. If adopted, any new development would be subject to the regulations under the renewed MRP.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

2016 Groundwater Management Plan

The 2016 Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water

[162] MRP Number CAS612008

manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the SFPUC to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by Valley Water's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu recharge through the provision of treated surface water, acquisition of supplemental water supplies, and water conservation and recycling.[163]

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to hydrology and water quality impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 8.2	**National Pollutant Discharge Elimination System Permit.** Comply with requirements in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP).
INC 8.4	**Runoff pollution prevention.** Reduce the amount of stormwater runoff and stormwater pollution entering creeks, water channels and the San Francisco Bay through participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program.
INC 8.5	**Site-specific stormwater treatment.** Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.
INC 8.7	**Stormwater quality.** Improve the water quality of stormwater and reduce flow quantities.

Source: City of Mountain View, *Mountain View 2030 General Plan*. July 10, 2012. Pp. 131-132

East Whisman Precise Plan

The Precise Plan contains policies that pertain to hydrology and water quality. These include integration of green stormwater infrastructure, treatment of runoff, and compliance with the MRP. The

[163] Valley Water. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2016.

Precise Plan includes the following design guidelines and standards related to hydrology and water quality:

- Green infrastructure measures shall be placed into retrofitted streets as feasible, and as required by the MRP and City's Green Stormwater Infrastructure Plan and other plans and goals,
- Green infrastructure measures are required in new streets, and as required by the Municipal Regional Permit and the City's Green Infrastructure Plan and other plans and goals,
- New public open spaces would be designed to incorporate best practices in sustainability, including water use and conservation, stormwater management, landscaping, and drought tolerant planting,
- New construction shall meet the baseline indoor and outdoor water performance standards defined by LEED, Green Point Rated, and mandatory CalGreen requirements,
- New construction shall install dual plumbing for potable and recycled water use, and
- When the recycled water system is adjacent to the property, new construction shall install the infrastructure necessary to connect to the recycled water system.

5.9.1.2 *Existing Conditions*

Stormwater Drainage

The project site is located within the Stevens Creek watershed, with the nearest waterway being Stevens Creek located approximately 0.9-mile west of the site. Stevens Creek eventually flows into the San Francisco Bay near Long Point, north of NASA Ames Research Center/Moffett Federal Airfield.

Stormwater runoff from impervious surfaces within the Precise Plan area is collected by a municipal storm drain system consisting of storm drain inlets, conveyance pipes, culverts, channels and retention basins operated by the City of Mountain View Public Works Department. Drainage into the City system generally flows south to north towards San Francisco Bay.

The project site consists of 83 percent impervious surfaces (or 31.7 acres) and 17 percent (or 6.5 acres) pervious surfaces. Stormwater runoff from the project site is primarily conveyed to Stevens Creek which flows into the Lower South Bay via Whisman Slough and ultimately to the San Francisco Bay.

Water Quality

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

While there are no streams, creeks, ponds, or other surface water bodies located within the project site, Stevens Creek is located 0.9-mile west of the site. Stevens Creek is on the 2006 Clean Water Act

Section 303(d) list due to impairment from toxicity from unknown sources. The California Water Board is in the process of examining the current status of impairment.

Groundwater

The Precise Plan area (including the project site) overlies the Santa Clara subbasin. The 225 square-mile Santa Clara groundwater basin provides municipal, domestic, industrial, and agricultural water supply to the area.

Valley Water prepared a Groundwater Management Plan for the Santa Clara and Llagas subbasins in 2016, describing its comprehensive groundwater management framework including objectives and strategies, programs and activities to support those objectives, and outcome measures to gauge performance. The Groundwater Management Plan is the guiding document for how Valley Water will ensure groundwater basins within its jurisdiction are managed sustainably. The Santa Clara subbasin has not been identified as a groundwater basin in a state of overdraft.

The project site is underlain by two aquifers located between two and 30 feet bgs and between 55 and 160 feet bgs, respectively.[164] Depth to groundwater on the project site varies between six to 16 feet bgs, as discussed in Section 5.6 Geology and Soils.

Flooding

The project site is located within Flood Zone X, which is not a Special Flood Hazard Area as identified by FEMA FIRM.[165] Flood Zone X is defined as an area determined to be outside the one percent and 0.2 percent annual chance floodplains, indicative of a minimal flood hazard.

Seiches, Tsunamis, and Mudflows

A seiche is the oscillation of a body of water, typically caused by changes in atmospheric pressure, strong winds, earthquakes, tsunamis, or tidal movements. Seiches occur most frequently in enclosed or semi-enclosed basins such as lakes, bays, or harbors. A damaging seiche has not been recorded in the San Franscisco Bay Area as far as records indicate.[166]

Tsunamis are long period water waves caused by underwater seismic events, volcanic eruptions, or undersea landslides. The Precise Plan area, and therefore the project site, is not located within an identified tsunami inundation area.[167]

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[164] Schlumberger. *2020 Annual Progress Report – Middlefield-Ellis-Whisman Fairchild and Regional Groundwater Remediation Programs, Mountain View, California.* April 15, 2021. Accessed October 11, 2021. https://semspub.epa.gov/work/09/100023585.pdf

[165] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06085C0045H. Effective Date May 18, 2009.

[166] City of Mountain View. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR*. SCH #2011012069. September 2012.

[167] California Emergency Management Agency, California Geological Survey, University of Southern California. Tsunami Inundation Map for Emergency Planning – Mountain View Quadrangle. 2009.

5.9.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hydrology and water quality, would the project:

1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
3) 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 which would:
   - result in substantial erosion or siltation on- or off-site;
   - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
   - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
   - impede or redirect flood flows?
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

5.9.2.1 *Project Impacts*

Impact HYD-1:	**Both Project Options:** The project (under either option) would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that compliance with the General Construction Permit, MRP, and Precise Plan design guidelines and standards would ensure future project construction and post-construction runoff would not result in substantial sources of polluted runoff and impacts would be less than significant.[168]

The project (under either option) would disturb more than one acre of soil and would be subject to the requirements of the statewide NPDES General Construction Permit to reduce runoff and pollution in runoff from construction activities, including preparation of a SWPPP and implementation of stormwater control BMPs.

The project (under either option) would also replace more than 10,000 square feet of impervious surfaces and would be required to meet the requirements of the MRP. The MRP requires regulated

[168] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 134 – 135.

projects to include LID practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained. If adopted in May 2022, the project would be subject to the renewed MRP stormwater treatment requirements.

The project (under either option) would implement the following design guidelines and standards from the Precise Plan:

- Green infrastructure measures shall be placed into retrofitted streets as feasible, and as required by the MRP and City's Green Stormwater Infrastructure Plan and other plans and goals,
- Green infrastructure measures are required in new streets, and as required by the Municipal Regional Permit and the City's Green Infrastructure Plan and other plans and goals,
- New public open spaces would be designed to incorporate best practices in sustainability, including water use and conservation, stormwater management, landscaping, and drought tolerant planting,
- New construction shall meet the baseline indoor and outdoor water performance standards defined by LEED, Green Point Rated, and mandatory CalGreen requirements,
- New construction shall install dual plumbing for potable and recycled water use, and
- When the recycled water system is adjacent to the property, new construction shall install the infrastructure necessary to connect to the recycled water system.

As discussed above, the project (under either option) would comply with General Construction Permit, current MRP, and Precise Plan design guidelines and standards, reducing water quality impacts to a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact**])

Impact HYD-2:	**Both Project Options:** The project (under either option) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that new development under the Precise Plan would not substantially decrease groundwater supplies or interfere with sustainable groundwater management because development would not be located on or impact recharge facilities, pump plants, or drinking water treatment plants.

The project (under either option) would result in 74 percent impervious surfaces. Compared to existing site conditions, this would decrease impervious surfaces in the project site by 11 percent (or approximately 150,150 square feet). The decrease in impervious surfaces would proportionally reduce the amount of runoff on-site, compared to existing conditions. Since the proposed project would reduce the estimated runoff from the site and comply with the General Construction Permit and current MRP, the project would not result in substantial sources of polluted runoff and impacts would be less than significant.

As discussed in Section 5.9.1 Environmental Setting the depth to groundwater varies across the site between six to 16 feet bgs. The project (under either option) would require excavation to a maximum depth of 50 feet bgs for building foundations and utility connections. Additionally, the project with District Utilities System Option would require drilling to a depth of approximately 110 feet bgs for installation of geobores. Thus, groundwater would be encountered during project construction (under either option). According to a Preliminary Geotechnical Investigation prepared for the project, groundwater would be extracted at a rate of approximately 40 to 80 gallons per minute, or 57,600 to 115,200 gallons per day during construction until building foundations are completed.[169] The project would implement COA GEO-1.1 to minimize the volume of groundwater removed during project construction and ensure construction dewatering does not substantially decrease groundwater supplies.

Furthermore, as noted in Section 5.8 Hazards and Hazardous Materials, the project site is located within the MEW Superfund Study Area. Potentially polluted dewatered groundwater would be dealt with as part of the SMP required as part of Precise Plan MM HAZ-3.1, as noted in Section 5.8 Hazards and Hazardous Materials. The SMP would be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction. A Health and Safety Plan establishing appropriate protocols for working in hazardous materials shall also be prepared. During construction within the MEW Superfund Study Area, the project (under either option) would be required to implement EPA-approved measures during dewatering, as applicable.

Additionally, the project (under either option) would not permanently deplete groundwater supplies or interfere with groundwater recharge because the project options would not directly use groundwater and the site does not contribute to recharge because it is mostly paved.

In conclusion, with implementation of the above condition of approval for construction dewatering the project (under either option) would not substantially decrease groundwater supplies or interfere with implementation of the sustainable groundwater management plan for the Santa Clara Valley Groundwater basin. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[169] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2.* January 29, 2021. Revised February 8, 2021. P. 24.

Impact HYD-3: **Both Project Options:** The project (under either option) 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 which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that with implementation of standard conditions of approval and MRP and Precise Plan standards and guidelines, the City's stormwater system would adequately convey flows from buildout of the Precise Plan and that future development under the Precise Plan would have a less than significant impact to the existing storm drainage system and the existing drainage patterns of the area.[170]

The project (under either option) would redevelop the existing site with mixed-use office, residential, retail, and open space uses. As discussed under Impact HYD-2, the project (under either option) would result in a decrease of impervious surfaces, thereby resulting in a corresponding decrease in surface runoff from the site compared to existing, pre-project conditions. Because the project (under either option) would decrease impervious surface area and would not cause increased erosion, silt pollution, or other impacts to surface waters, the project site is not subject to a hydromodification management plan (HMP). However, it would be required to comply with MRP Provision C.3 requirements requiring LID practices and water treatment measures. With a decrease of surface runoff, the existing storm drain system would continue to accommodate flows from the site. As a result, the project (under either option) would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, create runoff that would exceed the capacity of existing or planned drainage systems, or provide substantial additional sources of polluted runoff. Furthermore, because there are no waterways on or adjacent to the project site, the project would not alter the course of a river or stream.

Standard Conditions of Approval:

COA HYD-2.1: **Both Projects Options:** The project (under either option) shall implement the following:

- **State of California Construction General Stormwater Permit.** A "Notice of Intent" (NOI) and "Stormwater Pollution Prevention Plan" (SWPPP) shall be prepared for construction projects disturbing one (1) acre or more of land. Proof of coverage under the State General Construction Activity Stormwater Permit shall be attached to the building plans.
- **Construction Best Management Practices.** All construction projects shall be conducted in a manner which prevents the release of hazardous materials, hazardous waste, polluted water, and sediments to the storm drain system.

[170] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P. 137

- **Construction Sediment and Erosion Control Plan.** The applicant shall submit a written plan acceptable to the City which shows controls that would be used at the site to minimize sediment runoff and erosion during storm events. The plan shall include installation of the following items where appropriate: (a) silt fences around the site perimeter; (b) gravel bags surrounding catch basins; (c) filter fabric over catch basins; (d) covering of exposed stockpiles; (e) concrete washout areas; (f) stabilized rock/gravel driveways at points of egress from the site; and (g) vegetation, hydroseeding, or other soil stabilization methods for high-erosion areas. The plan shall also include routine street sweeping and storm drain catch basin cleaning.
- **Stormwater Treatment (C.3).** This project would create or replace impervious surface; therefore, stormwater runoff shall be directed to approved permanent treatment controls as described in the City's guidance document entitled, "Stormwater Quality Guidelines for Development Projects."
- **Stormwater Management Plan – Third Party Engineer's Certification.** The Final Stormwater Management Plan shall be certified by a qualified third-party engineer that the proposed stormwater treatment controls comply with the City's Guidelines and Provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP). A list of qualified engineers is available at the following link: http://www.scvurppp-w2k.com/consultants_list.shtml.

The Precise Plan design guidelines require new landscaping to incorporate stormwater capture and treatment into landscaping design and for new public spaces to implement best practices for stormwater management. By decreasing the amount of impervious surfaces on-site and complying with the MRP and Precise Plan design guidelines, the project (under either option) would have a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HYD-4:	**Both Project Options:** The project (under either option) would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded future development allowed under the Precise Plan would result in less than significant impacts from release of pollutants due to inundation because the Precise Plan Area is not located within an area of high flood hazard, dam inundation, or tsunami hazard risk, and future development would comply with Mountain View Fire Department (MVFD) requirements for storage of hazardous materials.[171]

The project site is not located in an identified FEMA 100-year flood hazard zone or subject to tsunamis or seiches.[172] The MVFD requires any facility storing large quantities of any hazardous materials to prepare a Hazardous Materials Business Plan program (HMBP). The project with District Utilities

[171] Ibid.
[172] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06085C0045H. Effective Date May 18, 2009.

System Option would be required to prepare and implement a HMBP approved by MVFD which includes a contingency plan that describes the facility's response procedures in the event of a hazardous materials release. With implementation of the HMBP, and based on the location of the project and the fact that it would not include significant amounts of pollutants, the project would not result in a release of pollutants from flooding, seiches, or tsunamis, and would have a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HYD-5:	**Both Project Options:** The project (under either option) would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Same Impact as Approved Project [Less than Significant Impact])**

Valley Water's GWMP establishes recharge facilities, recycled water systems, and conservation strategies to proactively manage groundwater and surface water resources within its jurisdiction. Natural recharge of the groundwater basin occurs along the margins and southern portion of the subbasin where high lateral and vertical permeability allow surface water to infiltrate the aquifers. Percolation of precipitation within recharge areas replenishes groundwater and contributes to the recharge of principal aquifers.[173] There are no recharge facilities, pump plants, or drinking water treatment plants in the Precise Plan area, and therefore, in the project site.[174] The Precise Plan EIR concluded that future development under the Precise Plan would result in less than significant impacts to recharge facilities, pump stations, or drinking water plants because no such facilities are located within the Precise Plan area and it would not interfere with the existing SFPUC pipelines that cross through the Precise Plan area.

The project (under either option) is consistent with the development assumptions in the Precise Plan EIR and would, therefore, result in the same less than significant impact to these facilities. **(Same Impact as Approved Project [Less than Significant Impact])**

[173] California Department of Water Resources. *Santa Clara Valley Groundwater Basin, San Mateo Subbasin*. February 2004. and Santa Clara Valley Water District. *Groundwater Management Plan.* November 2016.
[174] Santa Clara Valley Water District. *Groundwater Management Plan.* November 2016.

5.9.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HYD-1:	**Both Project Options:** The project (under either option) would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Yes	LTS	None	N/A
HYD-2:	**Both Project Options:** The project (under either option) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Yes	LTS	None	N/A
HYD-3:	**Both Project Options:** The project (under either option) 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 which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.	Yes	LTS	None	N/A
HYD-4:	**Both Project Options:** The project (under either option) would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.	Yes	LTS	None	N/A
HYD-5:	**Both Project Options:** The project (under either option) would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant

5.10 LAND USE AND PLANNING

5.10.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for land use has not substantially changed since the certification of the Precise Plan EIR.

5.10.1.1 *Regulatory Framework*

Local

Mountain View 2030 General Plan

The General Plan contains policies to avoid significant impacts due to land use and planning impacts. The following policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 3.4	**Land use conflict.** Minimize conflicts between different land uses
LUD 3.8	**Preserved land use districts.** Promote and preserve commercial and industrial districts that support a diversified economic base.
LUD 19.6	**Residential transitions.** Require development to provide sensitive transitions to adjacent residential uses.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 49, 65

East Whisman Precise Plan

The Precise Plan encompasses an approximately 412-acre area in the City of Mountain View that is generally bounded by US 101 and Moffett Federal Airfield/NASA Ames Research Center to the north, Central Expressway to the south, the City of Sunnyvale to the east, and North Whisman Road to west. The Precise Plan is intended to serve as the primary document and reference guide for the future development and redevelopment of the Precise Plan area. In addition to providing the community and decision makers with a clear vision for the Precise Plan area, the Precise Plan is intended to provide clear policy and regulatory framework by which future development projects and public improvements would be reviewed. The Precise Plan area has been divided into four Character Areas (Mixed-Use Area, Village Center, Employment Area North, and Employment Area South) which function similar to land use districts with specified allowed land uses, development standards, and building placement and massing regulations.

The Precise Plan includes development standards and design criteria that have been adopted to function, along with the standards in the City Code, to limit land use conflicts and provide for compatibility with surrounding properties and neighborhoods. Considerations that are intended to mitigate or address potential adverse effects to adjacent developments or neighborhoods from traffic, noise, odors, visual nuisances, or other similar effects may include, but are not limited to: the placement or orientation of buildings and entryways, parking areas, buffers, and the addition of landscaping, walls, or both.

5.10.1.2 *Existing Conditions*

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan and is zoned P-41 East Whisman Precise Plan. The site is currently developed with 23 office and light industrial buildings, as well as landscaping, and surface parking lots. The site is located adjacent to the VTA Middlefield Light Rail Station. The Hetch Hetchy/TOD Trail is located approximately 65 feet west of the site, across Ellis Street, and the existing VTA multi-use path bisects the project site and is located on the west side of the light rail tracks. Surrounding land uses include office and light industrial uses to the north, south, and east, and Sunnyvale Municipal Golf Course to the east. Existing residential neighborhoods are located further from the project site to the west, east, and south (refer to Figure 3.2-3).

5.10.2 Impact Discussion

For the purpose of determining the significance of the project's impact on land use and planning, would the project:

1) Physically divide an established community?
2) Cause a significant 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?

5.10.2.1 *Project Impacts*

Impact LU-1:	**Both Project Options:** The project (under either option) would not physically divide an established community. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded implementation of the Precise Plan would not physically divide an established community because it would not include highways or railways that would impact existing communities, instead it would improve connectivity.[175] The project (under either option) proposes land uses consistent with the Precise Plan and similar to the existing land uses surrounding the project site (refer to Figure 3.2-3). The project (under either option) does not involve components that would physically divide an existing community (i.e., highways or railways). New private roadways are proposed that would provide connections throughout the project site and surrounding neighborhoods. The new roadways would be reviewed during planning permit entitlement review (via Planned Community Permit and Development Review Permits) and would be required to meet City circulation and design requirements in order to create an integrated and cohesive neighborhood. Additionally, the project (under either option) would construct a bicycle and pedestrian trail network throughout the site to improve access to and circulation through the site from the Hetch Hetchy/TOD Trail, Middlefield Light Rail Station, VTA multi-use path, and throughout the Precise Plan area. The proposed bicycle and pedestrian paths would be reviewed during the planning permit entitlement review (via Planned Community Permit and Development Review Permits) and would be required to meet City circulation and design requirements. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[175] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 144.

Impact LU-2:	**Both Project Options:** The project (under either option) would not cause a significant 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. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that the Precise Plan incorporates standards and guidelines to minimize environmental impacts and would be consistent with land use plans, policies, and regulations including the General Plan, Zoning Ordinance, Moffett Field CLUP, and Plan Bay Area 2040. The project's consistency with these land use and development assumptions are discussed in detail below (under either option).

General Plan

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan. The General Plan High-Intensity Office designation supports major commercial operations, such as corporations, financial and administrative offices, high-technology industries, and other scientific facilities, as well as supporting retail and other service uses. The General Plan East Whisman Mixed-Used designation promotes a mix of offices, neighborhood-serving commercial, multi-family residential, lodging, and small businesses in the core of the East Whisman area. The project (under either option) would redevelop the site with a mix of office, multi-family residential, retail, civic/community uses, and parkland/open space consistent with the type of development envisioned in the General Plan.

East Whisman Precise Plan

As noted in Section 3.3 Consistency with General Plan Designation and Zoning District, the site is zoned P-41 East Whisman Precise Plan and is located in the Mixed-Use and North Employment Character Areas. These Character Areas allow a mix of low, moderate, and high-intensity uses of office, R&D, multi-family residential, hotel, and retail and service uses. The maximum base building height allowed on-site ranges from 60 to 95 feet; however, additional height allowances of 65 to 135 feet are provided for projects with park dedication, ground floor neighborhood commercial space, and close proximity to light rail. The "base" FAR for the site varies from 0.40 for non-residential development to 1.0 for residential/mixed-use development. The maximum FAR allowed ranges from 0.5 to 1.0 for non-residential development and 2.5 to 3.5 for residential/mixed-use development.

The proposed land uses (under either option) are consistent with the type of development envisioned in the Precise Plan for the Mixed-Use and Employment North Character Areas. The project (under either option) proposes non-residential FARs ranging from 0.39 to 1.0 and residential/mixed-use FARs ranging from 1.12 to 1.66 with maximum building heights of 16 to 125 feet. The MPMP is proposing to use "bonus" FAR for both residential and non-residential development as permitted in the Precise Plan. Thus, the project would be consistent with the development standards for the site under the East Whisman Precise Plan zoning district.

Moffett Field CLUP

The Precise Plan EIR concluded that development allowed under the Precise Plan would not conflict with the Moffett Field CLUP because the Precise Plan includes standards and guidelines to minimize environmental impacts and would be consistent with the CLUP.[176] As noted in Section 5.8 Hazards and Hazardous Materials, the project site is located within the AIA and within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. Additionally, the majority of the project site is not located within any noise contours of the Moffett Federal Airfield, however, the parcels at 520-530 Logue Avenue and 500-526 Clyde Avenue (APN 160-57-008), 485 Clyde Avenue (APN 160-57-006), and 495 Clyde Avenue (APN 160-57-007) are located within the 65 dB noise contour of the Moffett Federal Airfield (refer to Figure 5.12-1).

As discussed in Section 5.8 Hazards and Hazardous Materials, the project (under either option) proposes buildings with heights 16 to 125 feet, and depending on the amsl at the building location, may require consultation with the FAA to obtain a "Determination of No Hazard" or "Determination of No Hazard with Conditions", which may require an avigation easement as noted in the Precise Plan. Additionally, as discussed in Section 5.12 Noise, the project (under either option) proposes office and parking uses within the 65 dBA noise contour for the Moffett Federal Airfield which would be an acceptable noise level for the uses proposed. For these reasons, the project (under either option) would not conflict with airport operations at Moffett Federal Airfield.

Additionally, the properties at 433, 485, and 495 Clyde Avenue are located within the turning safety zone of the Moffett Federal Airfield. The proposed land uses (office, parking, and retail/community/civic space) and densities of 200 people per acre or less are consistent with the CLUP as confirmed with Santa Clara County Department of Planning and Development on July 15, 2021.

Plan Bay Area 2040/2050

As noted in Section 5.7 Greenhouse Gas Emissions above, in October 2021, ABAG adopted Plan Bay Area 2050 which builds on Plan Bay Area 2040 and includes 35 strategies for housing, transportation, economic viability and the environment. Although Plan Bay Area 2050 was adopted, it will take several years for the updated plan to be reflected in the regional and county-wide transportation models, so land uses and development projections based on Plan Bay Area 2040 are used as the foundation for this analysis. The Precise Plan EIR concluded that development allowed under the Precise Plan would not conflict with the Plan Bay Area 2040 because the Precise Plan meets the intent of Plan Bay Area 2040 to focus growth in PDAs and streamline the review process for development projects. Plan Bay Area 2040 focuses future growth in PDAs near transit facilities in order to encourage more sustainable growth in the region. The project (under either option) includes high density mixed-use development adjacent to the Middlefield Light Rail Station and within an identified PDA. Therefore, the project (under either option) would be consistent with Plan Bay Area 2040.

For these reasons, the project would not conflict with applicable land use plans, policies, and regulations and the impact would be less than significant. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[176] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P. 145

5.10.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
LU-1:	**Both Project Options:** The project (under either option) would not physically divide an existing community.	Yes	LTS	None	N/A
LU-2:	**Both Project Options:** The project (under either option) would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating n environmental effect.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant.

5.11 MINERAL RESOURCES

5.11.1 Environmental Setting

An analysis of mineral resources impacts associated with implementation of the Precise Plan was included in the Geology and Soils Section of the Precise Plan EIR. The environmental setting, including the regulatory framework and existing site conditions, for mineral resources has not substantially changed since the certification of the Precise Plan EIR.

5.11.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

5.11.1.2 *Existing Conditions*

Based on mapping by the California Division of Mines and Geology, as well as mapping by the California Department of Conservation, there have been no mineral or aggregate sources of statewide importance identified within the Mountain View city limits.[177]

5.11.2 Impact Discussion

For the purpose of determining the significance of the project's impact on mineral resources, would the project:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
2) 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?

[177] California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification: Aggregate Materials in the San Francisco Monterey Bay Area: Classification of Aggregate Resource Areas: South San Francisco Bay Production – Consumption Region*. Map. 1987.

5.11.2.1 *Project Impacts*

Impact MIN-1:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **[Same Impact as Approved Project (No Impact)]**

There are no minerals or aggregate resources of statewide importance located in the Precise Plan area (which includes the project site). Implementation of the project (under either option), therefore, would not result in the loss of a known mineral resource. This is the same impact as disclosed in the Precise Plan EIR.[178] **(Same Impact as Approved Project [No Impact])**

Impact MIN-2:	**Both Project Options:** The project (under either option) would not 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. **(Same Impact as Approved Project [No Impact])**

As noted above, there are no minerals or aggregate resources of statewide importance located in the Precise Plan area (which includes the project site). Implementation of the project (under either option), therefore, would not result in the loss of a locally important mineral resource recovery site. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [No Impact])**

5.11.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
MIN-1:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state.	Yes	NI	None	N/A
MIN-2:	**Both Project Options:** The project (under either option) would not 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.	Yes	NI	None	N/A

Abbreviation: NI – No Impact.

[178] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 90.

5.12 NOISE

5.12.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for noise and vibration has not substantially changed since the certification of the Precise Plan EIR.

5.12.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, L_{dn}, or CNEL.[179] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[179] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 p.m. and 10:00 p.m. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

5.12.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects, including light rail, buses, and transit stations. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 5.12-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 5.12-1: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

State, Regional, and Local

California Building Standards Code

The CBC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

California Green Building Standards Code

For commercial uses, CalGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

Moffett Federal Airfield Comprehensive Land Use Plan

The Moffett Federal Airfield is located approximately 0.5-mile northwest of the project site. The Moffett Federal Airfield CLUP includes noise exposure maps and guidelines intended to minimize the public's exposure to excessive noise and safety hazards. The northern half of the project site is located within the 65 dBA CNEL noise contour zone, and the southern half of the project site is located outside of the 65 dBA CNEL noise contour zone, as shown in Figure 5.12-1 below.[180] The following policies from the Moffett Federal Airfield CLUP would be applicable to MPMP.

Policy	Description
Noise	
N-1	The Community Noise Equivalent Level (CNEL) method of representing noise levels shall be used to determine if a specific land use is consistent with the CLUP.
N-2	In addition to the other policies herein, the Noise Compatibility Guidelines presented in Table 3.11-2 shall be used to determine if a specific land use is consistent with this CLUP.
N-3	Noise impacts shall be evaluated according to the Aircraft Noise Contours.
N-4	No residential or transient lodging construction shall be permitted within the 65 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound levels will be less than 45 dB CNEL and there are no outdoor patios or outdoor activity areas associated with the residential portion of a mixed-use residential project of a multi—unit residential project. (Sound wall noise mitigation measures are not effective in reducing noise generated by aircraft flying overhead).
N-6	Residential construction will not be permitted in the area between the 60 dB CNEL contour boundary and the 65 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound level will be no greater than 45 dB CNEL.
N-7	Noise level compatibility standards for other types of land uses shall be applied in the same manner as the above residential noise level criteria. Table 4-1 below presents acceptable noise levels for other land uses in the vicinity of the Airport.

County of Santa Clara. Airport Land Use Commission. November 18, 2016.

[180] Santa Clara County, Airport Land Use Commission. November 18, 2016. *Comprehensive Land Use Plan: Moffett Federal Airfield.* Figure 5: 2022 Aircraft Noise Contours with AIA. Accessed November 16, 2021. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/ALUC_NUQ_CLUP.pdf. P. 25.

Source: Santa Clara County, November 18, 2016.

MOFFETT FEDERAL AIRFIELD 2022 NOISE CONTOURS | FIGURE 5.12-1

Mountain View 2030 General Plan

The General Plan includes noise compatibility guidelines for various land uses. For reference, these guidelines are provided in Table 5.12-2 below.

Table 5.12-2: General Plan Outdoor Noise Environment Guidelines

Land Use Category	Community Noise Exposure in Decibels (CNEL) Day/Night Average Noise Level in Decibels (L_{dn})						
	55	60	65	70	75	80	85
Residential—Single-Family, Duplex, Mobile Homes							
Residential—Multi-Family, Transient Lodging—Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters, Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

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

Conditionally Acceptable:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

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

Unacceptable:
New construction or development clearly should not be undertaken.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. Pg. 163

The General Plan contains goals and policies to avoid significant impacts due to noise. The following goals and policies are applicable to the proposed project.

Policy	Description
Noise	
NOI 1.2	**Noise-sensitive land uses.** Require new development of noise-sensitive land uses to incorporate measures into the project design to reduce interior and exterior noise levels to the following acceptable levels: • New single-family developments shall maintain a standard of 65 dBA L_{dn} for exterior noise in private outdoor active use areas. • New multi-family residential developments shall maintain a standard of 65 dBA L_{dn} for private and community outdoor recreation use areas. Noise standards do not apply to private decks and balconies in multi-family residential developments • Interior noise levels shall not exceed 45 dBA L_{dn} in all new single-family and multi-family residential units. • Where new single-family and multi-family residential units would be exposed to intermittent noise from major transportation sources such as train or airport operations, new construction shall achieve an interior noise level of 65 dBA through measures such as site design or special construction materials. This standard shall apply to areas exposed to four or more major transportation noise events such as passing trains or aircraft flyovers per day.
NOI 1.3	**Exceeding acceptable noise thresholds.** If noise levels in the area of a proposed project would exceed normally acceptable thresholds, the City shall require a detailed analysis of proposed noise reduction measures to determine whether the proposed use is compatible. As needed, noise insulation features shall be included in the design of such projects to reduce exterior noise levels to meet acceptable thresholds, or for uses with no active outdoor use areas, to ensure acceptable interior noise levels.
NOI 1.6	**Sensitive uses.** Minimize noise impacts on noise-sensitive land uses, such as residential uses, schools, hospitals and child-care facilities.
NOI 1.7	**Stationary sources.** Restrict noise levels from stationary sources through enforcement of the Noise Ordinance.

Source: City of Mountain View, *Mountain View 2030 General Plan*, July 10, 2012. Pp. 166-167

Mountain View City Code

The City of Mountain View addresses noise regulations in Chapter 21 of the City Code. These regulations help protect the community from exposure to excessive noise and also specify how noise is measured and regulated. The regulations limit noise from stationary equipment (such as heating, ventilation, and air conditioning mechanical systems, delivery truck idling, loading/unloading activities, recreation activities, and parking lot operations) in Section 21.26 of the Code. The maximum allowable noise level is 55 dBA during the day and 50 dBA at night (10:00 p.m. to 7:00 a.m.), unless it has been demonstrated that such operation will not be detrimental to the health, safety, peace, morals, comfort or general welfare of residents subjected to such noise, and the use has been granted a permit by the City. Noise limits can also be regulated through project conditions of approval. The MVPD and City Attorney's office (Code Enforcement Division) enforce noise violations.

Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses (e.g., residences, daycare facility), and/or when construction duration lasts an extended period of time. Section 8.70.1 of the City Code restricts the hours of construction activity to 7:00 a.m. to 6:00 p.m., Monday through Friday. No construction activity is permitted on Saturday, Sunday, or holidays without written approval from the City. Construction activities are defined to include any physical activity on the construction site or in the project's staging area, including the delivery of materials.

5.12.1.3 *Existing Conditions*

The existing noise environment in the Precise Plan area (including the project site) results primarily from vehicular traffic along freeway and roadways (including US 101, East Middlefield Road, SR 237, North Whisman Road, and Ellis Street), VTA light railcar pass-bys and station stops, and aircraft associated with Moffett Federal Airfield. The northeast quadrant of the project site is located within the 65 dBA CNEL noise contour for the Moffett Federal Airfield, the remainder of the project site is located outside of the 65 dBA CNEL noise contour.

The nearest noise-sensitive receptors to the project site are residences located approximately 700 feet southwest of the site on Infinity Way (in South Whisman Precise Plan area). A noise monitoring survey was completed for the Precise Plan EIR in November 2018 which included one noise measurement on the project site near the location of the proposed Building O2 (ST-9) and one noise measurement at the northwest corner of the Ellis Street/East Middlefield Road intersection (LT-2), near the proposed Building R1.[181] Noise levels at the proposed Building O2 were measured at 50 dBA L_{eq} and noise levels at the corner of the Ellis Street/East Middlefield Road intersection were measured at 70 dBA L_{dn}

5.12.2 Impact Discussion

For the purpose of determining the significance of the project's impact on noise, would the project result in:

1) Generation of 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?
2) Generation of excessive groundborne vibration or groundborne noise levels?
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

[181] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P 167.

5.12.2.1 *Project Impacts*

Impact NOI-1:	**Both Project Options:** The project (under either option) would not result in generation of 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. **(Same Impact as Approved Project [Less than Significant Impact])**

As described in the Precise Plan EIR, a significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase over ambient noise levels at existing noise-sensitive receptors surrounding the project site and would exceed ambient noise standards presented in the General Plan or City Code at existing noise-sensitive receptors surrounding the project site. The following thresholds are used to determine if the project would result in a significant noise impact:

- A significant temporary noise impact would be identified if the hourly average noise levels exceed 60 dBA L_{eq}, and the ambient by at least five dBA L_{eq}, for a period of more than one year at adjacent residential land uses.
- A significant permanent noise level increase would occur if project-generated traffic would result in: a) a noise level increase of five dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) a noise level increase of three dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan (normally acceptable exterior noise level for office buildings is 67 dBA).

Construction Noise

The Precise Plan EIR concluded that buildout of the Precise Plan would have less than significant construction noise impacts with adherence to City Code requirements and standard conditions of approval.

As noted in Section 3.2.6 Construction Activities and Phasing, the project (under either option) would include demolition, site preparation, grading and excavation, building construction, architectural coatings, paving, and landscaping. Project construction would occur over four phases and take a total of approximately 8.5 years. During this time, construction activities would be completed between 7:00 a.m. and 6:00 p.m., Monday through Friday, with written approval granted by the chief building official for activities on Saturdays per City Code (Chapter 8). In addition, projects within the Precise Plan area would be required to implement the following standard conditions of approval, as identified in the Precise Plan EIR.

Standard Condition of Approval:

COA NOI-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Construction Noise Reduction**. The following noise reduction measures shall be incorporated into construction plans and contractor specifications to reduce the impact of temporary construction-related noise on nearby properties: a. comply with manufacturer's muffler requirements on all construction equipment engines; b. turn off construction equipment when not in use, where applicable; c. locate stationary equipment as far as practicable from receiving properties; d. use temporary sound barriers or sound curtains around loud stationary equipment if the other noise reduction methods are not effective or possible; e. and shroud or shield impact tools and use electric powered rather than diesel-powered construction equipment.
- **Construction Practices Noticing - Disturbance Coordinator**. The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise. The coordinator (who may be an employee of the general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site. The sign must also list an emergency after-hours contact number for emergency personnel.

In compliance with the allowed construction days and hours per the City Code and with implementation of the above standard conditions of approval, the project (under either option) would have a less than significant construction noise impact on adjacent sensitive receptors and future receptors associated with the proposed project. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Traffic Noise

The future traffic noise from buildout of the Precise Plan was modeled for the Precise Plan EIR. Traffic noise increases above existing levels from Precise Plan-generated traffic were estimated to be one to two dBA L_{dn} or less at noise sensitive receptors within and outside the Precise Plan area.[182] Since the increase in traffic noise result of the Precise Plan buildout (which includes traffic from the project under either option) would be less than three dBA, the Precise Plan EIR concluded that traffic noise generated by the Precise Plan (as well as project) would have a less than significant impact on noise-sensitive receptors in the area. **(Same Impact as Approved Project [Less than Significant Impact])**

[182] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp. 169-170.

Mechanical Equipment Noise

The Precise Plan EIR concluded that mechanical noise from future development would be less than significant in compliance with General Plan Policy NOI-1.7 and the below condition of approval.[183] General Plan Policy NOI-1.7 and the below standard conditions of approval restrict noise levels from stationary sources through enforcement of the Noise Ordinance, which states that stationary equipment noise from any property must be maintained at or below 55 dBA L_{eq} during daytime hours (i.e., between 7:00 a.m. and 10:00 p.m.) and at or below 50 dBA L_{eq} during nighttime hours (i.e., between 10:00 p.m. and 7:00 a.m.) as measured at residential land uses.

Standard Condition of Approval:

COA NOI-1.2: **Both Project Options: Mechanical Equipment (Noise).** The noise emitted by any mechanical equipment shall not exceed a level of 55 dB(A) during the day or 50 dB(A) during the night, 10:00 p.m. to 7:00 a.m., when measured at any location on the adjoining residentially used property.

The project would include mechanical systems (i.e., HVAC, exhaust fans, intake ventilation, air sourced heat pumps, and cooling towers) on portions of the roof tops of the proposed buildings under either project option. Under the project with District Utilities System Option, most mechanical equipment would be located inside Building O1. The Precise Plan EIR includes the standard condition of approval COA NOI-1.2 noted above to reduce potential noise impacts from mechanical equipment.

In compliance with General Plan Policy NOI-1.7 and with implementation of the above standard condition of approval COA NOI-1.2, the project (under either option) would not result in a significant impact from mechanical noise at residential land uses because mechanical equipment would be selected to achieve or remain below exterior noise level standards at nearby residential uses. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact NOI-2:	**Both Project Options:** The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**

The Precise Plan EIR determined that construction activities associated with development allowed under the Precise Plan would generate vibration from operation of heavy equipment and impact tools (e.g., jackhammers, hoe rams) and identified a less than significant vibration noise impact with implementation of Precise Plan EIR MM NOI-4.1.

[183] City of Mountain View. *Integrated Final Environmental Impact Report, East Whisman Precise Plan.* January 2020. Pp. 160 – 162.

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM NOI-4.1: Both Project Options: Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where project construction is anticipated to include vibration-generating activities such as pile driving or use of vibratory rollers, in close proximity to existing structures, site specific vibration studies should be concluded to determine the area of impact and to identify appropriate mitigation measures which may include the following:

- Identification of sites that would include vibration compaction activities such as pile driving and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-born vibration. Vibration levels should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task.
- Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions.
- Construction contingencies would be identified for when vibration levels approached the limits.
- At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements.
- When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
- Conduct post-survey on structures when either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

Project construction activities (under either option) would generate vibration from operation of heavy equipment and impact tools as described in the Precise Plan EIR. With the incorporation of Precise Plan EIR MM NOI-4.1, the project (under either option) would result in a less than significant vibration impact because the project (under either option) would not include pile driving, locate vibration compaction activities away from vibration sensitive structures, implement a vibration monitoring and construction contingency plan, monitor structures affected by vibration, and conduct a post-construction survey of affected structures. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact NOI-3:	**Both Project Options:** The project (under either option) would be located within the vicinity of a private airstrip or 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. However, the project would not expose people residing or working in the project area to excessive noise levels. **(Same Impact as Approved Project [Less than Significant Impact])**

As shown in Figure 5.12-1, most of the project site is not located within any noise contours of the Moffett Federal Airfield; however, the parcels at 500 Logue Ave, 485 Clyde Avenue and 495 Clyde Avenue are located within the 65 dB noise contour of the Moffett Federal Airfield. According to the CLUP noise compatibility policies and the City of Mountain View Outdoor Noise Acceptability Guidelines, aircraft noise levels of 65 dBA are considered acceptable for office uses and neighborhood parks, and conditionally acceptable for residential uses. According to the CLUP, all new construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design.

The project (under either option) proposes office and parking uses, along with a small portion of a park (Maude Park), within the 65 dBA contour for the Moffett Federal Airfield; no residential uses are proposed within this area. Thus, noise levels on-site would be considered acceptable under the CLUP noise compatibility policies and the City of Mountain View Outdoor Noise Acceptability Guidelines. Furthermore, CalGreen requires that commercial/office interior noise levels be maintained at 50 dBA L_{eq} (1-hr) or less during hours of operation and residential interior noise levels be maintained at 45 dBA L_{eq} (1-hr). As part of the City's building permit review process, construction drawings must confirm that measures have been taken to achieve a maximum interior noise level of 50 dBA L_{dn} for commercial/office tenant space and 45 dBA L_{dn} for residential space. To ensure the 50 dBA standard is met for commercial/office and 45 dBA standard is met for residential, a qualified acoustical specialist would prepare a detailed analysis of interior noise levels. Therefore, noise from aircraft would not substantially increase ambient noise levels at the project site and interior noise resulting from aircraft would be compatible with the project (under either option). This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.12.2.2 *Non-CEQA Impacts*

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Mountain View has policies (including General Plan Policies NOI 1.1 and NOI 1.2) that address existing noise conditions affecting a proposed project.

Future Exterior Noise Environment

As established by General Plan Policy NOI-1.2, exterior noise environments at private and community outdoor recreation use areas should be maintained at or below 65 dBA L_{dn} to be considered acceptable by the City of Mountain View. The noise standards do not apply to private decks and balconies in multi-family residential developments such as those proposed by the project (under either option). According to the Precise Plan EIR, noise produced by vehicular traffic along roadways in the Precise

Plan area would expose residential land uses to levels above the 65 dBA L_{dn} exterior compatibility threshold.

Consistent with the Precise Plan EIR, as part of the City's building permit review process, a qualified acoustical specialist shall prepare a detailed analysis of exterior noise levels and construction drawings would confirm measures have been taken to achieve a City's exterior noise standards for community outdoor recreation use areas.

Future Interior Noise Environment

Residential Uses

General Plan policies and the CBC's interior noise level standard of 45 dBA L_{dn} apply to the residential portion of the project (under either option). Interior noise levels would vary depending upon the design of the buildings (relative window area to wall area) and the selected construction materials and methods. Standard residential construction provides 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. According to the Precise Plan EIR, estimated future noise levels 75 feet from the centerline of Middlefield Avenue between Logue Avenue and Ferguson Drive would be up to 68 dBA DNL; therefore, the interior noise levels of the proposed residential building could exceed 45 dBA DNL when windows are partially open. In order to reduce the interior noise at the proposed residential units, the project (under either option) shall implement the following condition of approval.

Standard Condition of Approval:

COA NOI-2.1: Both Project Options: Site-Specific Building Acoustical Analysis. A qualified acoustical consultant shall review final site plans, building elevations, and floor plans prior to construction to calculate expected interior noise levels as required by State noise regulations. Project-specific acoustical analyses are required by the California Building Code to confirm that the design results in interior noise levels reduced to 45 dBA L_{dn} or lower. The specific determination of what noise insulation treatments are necessary shall be completed on a unit-by-unit basis. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans and approved prior to issuance of a building permit. Building sound insulation requirements shall include the provision of forced-air mechanical ventilation for all residential units as recommended by the qualified acoustical consultant, so that windows can be kept closed at the occupant's discretion to control noise. Special building techniques (e.g., sound-rated windows and building facade treatments) shall be implemented as recommended by the qualified acoustical consultant to maintain interior noise levels at or below acceptable levels. These treatments shall include, but are not limited to, sound-rated windows and doors, sound-rated wall construction, acoustical caulking, protected ventilation openings, etc.

Commercial Uses

As mentioned under Impact NOI-3 above, the CalGreen Code requires that interior noise levels be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at the proposed commercial uses. According to the Precise Plan EIR, noise levels in the project vicinity would be approximately 68 dBA DNL. Additionally, a portion of the project site is located within the 65 dBA contour for the Moffett Federal Airfield. Standard construction materials for commercial uses would provide at least 20 to 25 dBA of noise reduction in interior spaces. The inclusion of adequate forced-air mechanical ventilation systems is normally required so windows may be kept closed at the occupant's discretion. The standard construction materials in combination with forced-air mechanical ventilation would satisfy the daytime threshold of 50 dBA $L_{eq(1\text{-}hr)}$.

5.12.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
NOI-1:	**Both Project Options:** The project (under either option) would not result in generation of 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.	Yes	LTS	None	N/A
NOI-2:	**Both Project Options:** The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels.	Yes	S	Precise Plan EIR MM NOI-4.1	LTS
NOI-3:	**Both Project Options:** The project (under either option) would be located within the vicinity of a private airstrip or 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. However, the project would not expose people residing or working in the project area to excessive noise levels.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant, S – Significant.

5.13 POPULATION AND HOUSING

5.13.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for population and housing has not substantially changed since the certification of the Precise Plan EIR.

5.13.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[184] The City of Mountain View Housing Element and related land use policies were last updated in 2014. At the time of circulation of this SEIR, the City is preparing an update to the Housing Element, which must be adopted by the state-mandated deadline of January 2023.

Regional and Local

Plan Bay Area 2040/2050

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified PDAs.[185]

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

In October 2021, ABAG adopted Plan Bay Area 2050 which includes 35 strategies for housing, transportation, economic viability and the environment and lays out a vision for policies and investments to make the bay area more affordable, connected, diverse, healthy and economically vibrant. It will take several years for the updated plan to be reflected in the regional and county-wide

[184] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed September 24, 2021. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[185] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed September 24, 2021.

transportation models, so land uses and development projections based on Plan Bay Area 2040 are used as the foundation for this analysis.

5.13.1.2 *Existing Conditions*

Implementation of the Precise Plan would result in a total of 27,360 employees and 10,750 residents at full buildout in 2030.[186] The growth projection for the Precise Plan is consistent with the growth projections for the area in the General Plan. Currently there is one single-family residence in the Precise Plan area located on Middlefield Road. There are no residential units on or adjacent to the project site.

5.13.2 Impact Discussion

For the purpose of determining the significance of the project's impact on population and housing, would the project:

1) 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)?
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

5.13.2.1 *Project Impacts*

Impact POP-1:	**Both Project Options:** The project (under either option) would not 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). **(Same Impact as Approved Project [Less than Significant Impact])**

The project would generate approximately 4,045 new residents, which is within the limits previously analyzed in the Precise Plan EIR.[187] For this reason, implementation of the project (under either option) would not result in substantial unplanned population growth in Mountain View or in the region beyond what was previously disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[186] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 172.

[187] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 172.

Impact POP-2:	**Both Project Options:** The project (under either option) would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site does not contain housing; therefore, the project (under either option) would not displace existing residents or housing. This is the same impact as disclosed in the Precise Plan EIR.[188] **(Same Impact as Approved Project [Less than Significant Impact])**

5.13.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
POP-1:	**Both Project Options:** The project (under either option) would not 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)	Yes	LTS	None	N/A
POP-2:	**Both Project Options:** The project (under either option) would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant.					

[188] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 173.

5.14 PUBLIC SERVICES

5.14.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for public services has not substantially changed since the certification of the Precise Plan EIR.

5.14.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside park land and open space for recreational purposes. It provides provisions for the dedication of park land and/or payment of fees in lieu of park land dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of park land dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

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

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to public services impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 1.1	**Adequate staffing.** Maintain adequate police and fire staffing, performance levels and facilities to serve the needs for the community.
PSA 2.7	**Police service levels and facilities.** Ensure Mountain View Police Department service levels and facilities meet demands from new growth and development.
Parks, Open Space and Community Facilities	
POS 1.1	**Additional parkland.** Expand park and open space resources to meet current City standards for open acreage and population in each neighborhood.
POS 1.2	**Recreation facilities in new residential developments.** Require new development to provide park and recreation facilities.
MOB 10.4	**Emergency response.** Monitor emergency response times and review emergency response time standards.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. Pgs. 176, 149-150, 114.

East Whisman Precise Plan

The Precise Plan establishes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area. The park and open space vision for the Precise Plan area includes a central park (one to two acres), up to six mini-parks (0.3 to one acres), a neighborhood park (two to three acres), a system of linear parks, and POPA open spaces. The Precise Plan envisions approximately three- to eight-acres would be acquired by the City with the park land in-lieu fees paid from residential development and creation of new open space areas within non-residential developments.

Additionally, the Precise Plan requires a Master Plan be submitted and approved by the City before proposing development within the Neighborhood Park Master Plan area, for which this project is located in. The Master Plan is intended to ensure appropriate location, access, and surrounding new development is planned for around a new two to three-acre park between Clyde and Logue Avenues.

Mountain View Municipal Code

Chapter 41 of the City Code contains a Park Land Dedication Ordinance, which sets requirements for park land dedication or in-lieu fees. The City requires developers to dedicate at least three acres of park land for each 1,000 persons who will live in a new housing project (owned or rented), or to pay an in-lieu fee that would be used to offset the increased demands on park facilities. The City also allows developers to propose, for City Council consideration, a privately owned, publicly accessible (POPA) open space within a residential development site for park land credit, reducing the land or in-lieu fee

obligation generated by the development.

5.14.1.2 *Existing Conditions*

Fire Protection Services

Fire protection services are provided to the project site by the MVFD. The MVFD provides fire suppression, rescue response, hazard prevention and education, and disaster preparedness services. The MVFD has an established response time of six minutes for "Medical Code Three" calls (i.e., those requiring expedited transport).

The City of Mountain View also participates in a mutual aid program with neighboring cities, including Palo Alto, Los Altos, and Sunnyvale. Through this program, one or more of the mutual aid cities would provide assistance to MVFD in whatever capacity was needed.

Fire Station Four is closest to the project site. Station Four is located at 229 North Whisman Road, approximately 0.3-miles southwest of the project site.

Police Protection Services

Police protection in the project site is provided by the Mountain View Police Department (MVPD). Officers patrolling the area are dispatched from police headquarters, located at 1000 Villa Street, approximately two miles southwest of the project site.

The MVPD has a goal to respond to Priority E and Priority 1 calls in less than four minutes at least 55 percent of the time.[189] MVPD has a mutual aid agreement with the surrounding jurisdictions, under which the other agencies would assist the MVPD in responding to calls when needed.

Schools

The project site is located within the Mountain View Whisman School District (MVWSD) and Mountain View-Los Altos Union High School District (MVLASD). Students in the project site would attend Vargas Elementary School located at 220 North Whisman Road (approximately 0.5-mile southwest of the project site) or Edith Landels Elementary School located at 115 West Dana Street (approximately two-miles southwest of the project site), Graham Middle School located at 1175 Castro Street (approximately two-miles southwest of the project site), and Mountain View High School located at 3535 Truman Avenue (approximately three-miles south of the project site). Table 5.14-1 shows the existing school enrollment, capacities, and estimated students generated by the project at these local schools. Data is reflective of 2019-2020 enrollment and capacities rather than 2020-2021 data due to the COVID-19 pandemic's impacts on student enrollment.

[189] Priority E and Priority 1 calls are considered the highest priority calls and signal emergency dispatch from the MVPD. Priority E calls are of higher importance because they are often associated with violent crime incidents.

Table 5.14-1: 2019-2020 School Enrollment and Capacity			
School	**Capacity**	**Enrollment**	**Estimated Number of Project-Generated Students**
Vargas Elementary School[1]	492	293	123*
Edith Landels Elementary School[1]	504	442	124*
Graham Middle School[2]	1,294	871	153
Mountain View High School[3]	1,640	2,183	190

Notes: * Approximate student generation per elementary school, assuming half of elementary students attend each school.

1 Cunningham, Elona. Jack Schreder & Associates, Inc. Personal Communication. October 19, 2021.

2 Westover, Rebecca. Principal, Graham Middle School. Personal Communication. January 19, 2022.

3 Mathiesen, Mike. Associate Superintendent, MVLASD. Personal Communication. December 9, 2021.

Parks and Open Space

The City of Mountain View currently owns or manages approximately 993 acres of parks and open space facilities, including 22 urban parks (13 of which are under joint use agreements with local school districts) and the Stevens Creek Trail. The closest parks to the project site include Devonshire Park, located approximately 0.5-mile northwest, and Pyramid Park, which is currently under construction and located 0.2-miles south of the project.

Libraries

The Mountain View Public Library, located at 585 Franklin Street, is the City's only library. It is located approximately three miles southwest of the project site.

5.14.2 Impact Discussion

For the purpose of determining the significance of the project's impact on public services, would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

1) Fire protection?
2) Police protection?
3) Schools?
4) Parks?
5) Other public facilities?

5.14.2.1 *Project Impacts*

Impact PS-1:	**Both Project Options:** The project (under either option) would not 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 fire protection services. **(Same Impact as Approved Project [Less than Significant Impact])**

The buildout of the Precise Plan (which includes the project under either option) would incrementally increase the needs for fire protection services.[190] The Precise Plan EIR concluded that there is existing capacity at nearby Fire Station Four to respond to additional service calls created by the Precise Plan (which includes either of the project options) and no new facilities or expansion of existing facilities would be required to serve the buildout of the Precise Plan.[191] In addition, the project (under either option) would be constructed to current Fire Code standards to increase fire safety overall. The MVFD reviews applications for new projects to ensure they comply with the City's current fire codes and standards. Therefore, the project (under either option) would have a less than significant impact on fire protection services. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-2:	**Both Project Options:** The project (under either option) would not 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 police protection services. **(Same Impact as Approved Project [Less than Significant Impact])**

MVPD maintains a staffing ratio of approximately 1.3 officers per 1,000 residents. As noted in Section 5.13 Population and Housing, the project (under either option) would construct up to 1,900 residential units, which would generate approximately 4,045 residents.[192]

The Precise Plan EIR concluded that growth in the City (including the buildout of the Precise Plan) would increase the demand for police services and the City has policies to ensure that police staffing is adequate to serve the needs of the community.[193] The MVPD confirmed that implementation of projects consistent with the Precise Plan (such as the project under either option) would not require the

[190] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 178.
[191] Ibid.
[192] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 178.
[193] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 179.

construction or expansion of police facilities. In addition, the project (under either option) would be reviewed during the building permit process to ensure safety features are incorporated to minimize the opportunity for criminal activity. For these reasons, the project (under either option) would have a less than significant impact on police protection services. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact PS-3:	**Both Project Options:** The project (under either option) would not 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 schools. **(Same Impact as Approved Project [Less than Significant Impact])**

The project (under either option) includes up to 1,900 residential units, which would generate approximately 4,045 residents.[194] It is estimated the project would generate a total of 247 elementary school students, 153 middle school students, and 190 high school students.[195] Based on the capacity, enrollment, and estimated number of project-generated students at the local schools (refer to Table 5.14-1), there is sufficient capacity at the schools to accommodate project-generated students.

The MVSD has a Level 1 fee program in place and the project would be subject to payment of applicable developer fees. Payment of the adopted developer fees by the applicant would, in accordance with Section 65995(h) of the California Government Code, fully and completely mitigate all school impacts. In addition, the project would contribute to the repayment of local general obligation bonds that would provide financing for capital projects at the schools assigned to the project.

The State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects. Those fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure. The Legislature has declared that the payment of those fees constitutes full mitigation for the impacts generated by new development.

Consistent with Government Code 65996 and the Precise Plan EIR, the project (under either option) would pay state-mandated school impact fees to offset impacts to local schools, reducing impacts to a less than significant level. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[194] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR Transportation analysis. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: Fehr and Peers. *East Whisman Precise Plan Project-Level Transportation Analysis.* August 2019. P.

[195] Based on the student generation rates provided by the Jack Schreder & Associates. December 8, 2021. K-5 = 0.085 (0.308 affordable), 6-8 = 0.039 (0.247 affordable), High School = 0.047 (0.312 affordable).

Impact PS-4:	**Both Project Options:** The project (under either option) would not 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 parks. **(Same Impact as Approved Project [Less than Significant Impact])**

The project (under either option) proposes a network of privately-owned publicly accessible open space, private open space, and land dedication for new public parks totaling 10.15 acres. Additionally, per the Precise Plan, the project (under either option) is a Master Plan that meets the requirements for the Neighborhood Park Master Plan area. Specifically, the project meets the requirements for a Neighborhood Park Master Plan because it identifies surrounding development and opportunity sites for a two- to three- acre park, dedicates land to the City for a neighborhood park, includes an illustrated park access network consistent with the Precise Plan Mobility Chapter, provides an implementation strategy, and is compliant with Moffett Field Comprehensive Land Use Plan noise compatibility policies. Project-related impacts to parks are discussed further in Section 5.15 Recreation below and are concluded to be less than significant. This is the same impact as disclosed in the Precise Plan EIR.[196] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact PS-5:	**Both Project Options:** The project (under either option) would not 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 other public facilities. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR concluded that the growth projected in the Precise Plan (which includes the project under either option), would not trigger a need for the City to build or operate a new library in the Precise Plan area.[197] This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[196] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 193.
[197] Ibid. P. 181.

5.14.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
PS-1:	**Both Project Options:** The project (under either option) would not 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 fire protection services.	Yes	LTS	None	N/A
PS-2:	**Both Project Options:** The project (under either option) would not 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 police protection services.	Yes	LTS	None	N/A
PS-3:	**Both Project Options:** The project (under either option) would not 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 schools.	Yes	LTS	None	N/A
PS-4:	**Both Project Options:** The project (under either option) would not 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 parks.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
PS-5:	**Both Project Options:** The project (under either option) would not 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 other public facilities.	Yes	LTS	None	N/A
Abbreviations: LTS – Less than Significant.					

5.15 RECREATION

The existing recreational setting, including regulatory framework, has not substantially changed since the certification of the Precise Plan EIR.

5.15.1 Environmental Setting

5.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside park land and open space for recreational purposes. It provides provisions for the dedication of park land and/or payment of fees in lieu of park land dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of park land dedication, or perform a combination of the two.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to recreation impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Parks, Open Space and Community Facilities	
POS 1.1	**Additional parkland.** Expand park and open space resources to meet current City standards for open acreage and population in each neighborhood.
POS 1.2	**Recreation facilities in new residential developments.** Require new development to provide park and recreation facilities.
POS 6.1	**Citywide network of pathways.** Develop a citywide network of pedestrian and bicycle pathways to connect neighborhoods, employment centers, open space resources and major destinations within the city.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 149-150.

East Whisman Precise Plan

The Precise Plan establishes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area.[198] The park and open space vision for the Precise Plan area includes a central park, up to six mini-parks, a neighborhood park, a system of linear

[198] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 172.

parks, and accessible open spaces. Approximately three- to eight-acres would be acquired by the City with the park land in-lieu fees paid and creation of new open space areas within non-residential developments.

Additionally, the Precise Plan requires a Master Plan be submitted and approved by the City before proposing development within the Neighborhood Park Master Plan area, for which the project site is located in. The Master Plan is intended to ensure appropriate location, access, and surrounding new development is planned for around a new two to three-acre park between Clyde and Logue Avenues.

Mountain View City Code

Chapter 41 of the City Code contains a Park Land Dedication Ordinance, which sets requirements for park land dedication or in-lieu fees. The City requires developers to dedicate at least three acres of park land for each 1,000 persons who will live in a new housing project (owned or rented), or to pay an in-lieu fee that would be used to offset the increased demands on park facilities. The City also allows developers to propose, for City Council consideration, a POPA space within a residential development site for park land credit, reducing the land or in-lieu fee obligation generated by the development.

5.15.1.2 *Existing Conditions*

As discussed in Section 5.14 Public Services, the City of Mountain View currently owns or manages approximately 993 acres of parks and open space facilities, including 22 urban parks and the Stevens Creek Trail. The closest park to the project site is Devonshire Park, located approximately 0.5-mile northwest. The closest trail is the Hetch Hetchy/TOD Trail located approximately 65 feet west.

5.15.2 Impact Discussion

For the purpose of determining the significance of the project's impact on recreation:

1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

5.15.2.1 *Project Impacts*

Impact REC-1:	**Both Project Options:** The project (under either option) would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **[Same Impact as Approved Project (Less than Significant Impact)]**

As noted in Section 5.13 Population and Housing, the project (under either option) would increase the number of residents and employees on-site above existing conditions, which would result in increased use of existing parks and recreational facilities in the project vicinity. The Precise Plan area currently

does not meet the City's standard of 3.0 acres of park land per 1,000 residents.[199] The Precise Plan includes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area (which would meet the City's standard of 3.0 acres per 1,000 residents).[200]

As described in Section 3.2.2 Parks and Open Space, the project (under either option) would include a network of privately-owned publicly accessible open space, private open space, and land dedication for public parks totaling 10.15-acres. Of the 10.15 acres of park land proposed, 2.87 acres would be POPA open space to be developed as part of the project and 7.28 acres would be dedicated to the City for development of future parks at a later date.

The 2.87-acre POPA open space would include a plaza area with outdoor seating, recreational amenities, flexible open area for temporary uses and events, as well as a landscaped multi-use path connecting to a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The recreational amenities may include bike parking, outdoor restaurant/bar, exercise equipment, communal/educational garden, sport courts, and a 1,000-square-foot community room/restroom building.

The addition of 10.15-acres of park land included in the project would offset the demand for recreational facilities by future employees and residents living and working on-site. The dedication of land and POPA open space would be consistent with the City's Park Land Dedication Ordinance and would reduce impacts to a less than significant level. For these reasons, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact REC-2:	**Both Project Options:** The project (under either option) would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **[Same Impact as Approved Project (Less than Significant Impact)]**

While the Precise Plan EIR did not explicitly identify impacts resulting solely from development of new recreational facilities, these impacts were analyzed in combination with other development allowed under the Precise Plan throughout the Precise Plan EIR, especially in Sections 3.2 Air Quality, 3.8 Hazards and Hazardous Materials, 3.9 Hydrology and Water Quality, and 3.11 Noise and Vibration. The project (under either option) would include a network of POPA open space, private open space, and land dedication for public parks totaling 10.15-acres. The environmental impacts associated with development of 2.87 acres of POPA open space and other private open space to be developed as a part of the proposed project are included in and discussed throughout this EIR. The environmental effects associated with development of the remaining 7.28 acres of parkland dedicated to the City for future development of City parks are discussed at a programmatic level throughout this EIR. Subsequent

[199] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 180.
[200] City of Mountain View. *East Whisman Precise Plan*. Adopted November 5, 2019. Amended October 13, 2020. P. 38.

environmental review would be required for the 7.28 acres of city parks once detailed designs are available. This is the same impact as disclosed in the Precise Plan EIR.[201] **(Same Impact as Approved Project [Less than Significant Impact])**

5.15.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
REC-1:	**Both Project Options:** The project (under either option) would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Yes	LTS	None	N/A
REC-2:	**Both Project Options:** The project (under either option) would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant.

[201] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 181.

5.16 TRANSPORTATION

The following discussion is based, in part, on a Multimodal Transportation Analysis (MTA) by Hexagon Transportation Consultants. This report is attached as Appendix H.

5.16.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for transportation has not substantially changed since the certification of the Precise Plan EIR.

5.16.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's OPR to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50-mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic level of service (LOS) standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to transportation impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 9.4	**Enhanced pedestrian activity.** Ensure commercial development enhances pedestrian activity through these strategies: • Encourage the first level of the building to occupy a majority of the lot's frontage, with exceptions for vehicle and pedestrian access • Allow for the development of plazas and dining areas • Encourage the majority of a building's ground floor frontage to provide visibility into the building by incorporating windows and doors • Require that ground floor uses be primarily pedestrian-oriented • Ensure pedestrian safety and access when designing parking areas and drive-through operations • Minimize driveways
LUD 17.2	**Transportation Demand Management strategies.** Require development to include and implement Transportation Demand Management strategies.
LUD 19.7	**NASA Ames and Moffett Field area connections.** Create stronger connections between East Whisman and the NASA Ames and Moffett Field Areas.
Mobility	
MOB 1.1	**Multimodal planning.** Adopt and maintain master plans and street design standards to optimize mobility for all transportation modes.
MOB 1.2	**Accommodating all modes.** Plan, design and construct new transportation improvement projects to safely accommodate needs of pedestrians, bicyclists, and transit riders, motorists, and persons with all abilities.
MOB 1.5	**Public accessibility.** Provide traffic calming, especially in neighborhoods and around schools, parks, and gathering places.
MOB 1.6	**Traffic calming.** Provide traffic calming, especially in neighborhoods and around schools, parks, and gathering places.
MOB 2.1	**Broad accessibility.** Improve universal access within private developments and public and transit facilities, programs and services.
MOB 3.2	**Pedestrian connections.** Increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers, and other destinations.
MOB 3.3	**Pedestrian and bicycle crossings.** Enhance pedestrian and bicycle crossings at key locations across physical barriers.
MOB 3.4	**Avoiding street widening.** Preserve and enhance citywide pedestrian connectivity by limiting street widening as a means of improving traffic.

Policy	Description
MOB 3.5	**Walking and bicycling outreach.** Actively engage the community in promoting walking and bicycling through education, encouragement, and outreach on improvement projects and programs.
MOB 4.1	**Bicycle network.** Improve facilities and eliminate gaps along the bicycle network to connect destinations across the City.
MOB 5.4	**Connecting key areas.** Identify and implement new or enhanced transit services to connect Downtown, El Camino Real, San Antonio, North Bayshore, East Whisman, and NASA Ames Research Center.
MOB 5.5	**Access to transit services.** Support right-of-way design and amenities consistent with local transit goals to facilitate access to transit services and improve transit as a viable alternative to driving.
MOB 7.1	**Parking codes.** Maintain efficient parking standards that consider reduced demand due to development conditions such as transit accessibility.
MOB 8.2	**Accommodating all modes.** Plan, design and construct new transportation improvement projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists and persons of all abilities.
MOB 8.3	**Multimodal transportation monitoring.** Monitor the effectiveness of policies to reduce vehicle miles traveled (VMT) per service population by establishing transportation mode share targets and periodically comparing travel survey data to established targets.
MOB 9.2	**Reduced vehicle miles traveled.** Support development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita VMT.
MOB 10.2	**Reducing travel demand.** Promote effective Transportation Demand Management programs for existing and new development.
MOB 10.3	**Avoiding street widening.** Limit widening of streets as a means of improving traffic and focus instead on operational improvements to preserve community character.
Infrastructure and Conservation	
INC 3.4	**Right-of-way regulations.** Ensure that right-of-way regulations comply with relevant street and highway codes while still prioritizing multimodal transportation in all right-of-way design.
INC 20.3	**Pollution-reducing technologies.** Encourage the use of non-fossil fuels and other pollution-reducing technologies in transportation, machinery and industrial processes.
INC 20.4	**Freight routes.** Identify and maintain primary freight routes that provide direct access to industrial and commercial areas.
INC 20.5	**Truck access.** Plan industrial and commercial development to avoid truck access through residential areas, and minimize truck travel on streets designated primarily for residential access by the General Plan.
Parks, Open Space and Community Facilities	
POS 2.3	**Pedestrian and bicycle access.** Improve pedestrian and bicycle access to parks, and create new connections to parks to minimize pedestrian and bicycle travel distances.

Policy	Description
POS 6.1	**Citywide network of pathways.** Develop a citywide network of pedestrian and bicycle pathways to connect neighborhoods, employment centers, open space resources and major destinations within the city.
POS 6.2	**At-grade crossings.** Minimize at-grade crossings of major roads when building new trails.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 53, 60, 65, 110-114, 129, 137, 149-150.

East Whisman Precise Plan

The Precise Plan area has many interlinked circulation networks, including light rail, shuttle and bus transit, complete streets, greenways, multi-use paths and regional highways. These networks connect to other areas in Mountain View and the region, while allowing comfortable travel within the Precise Plan area for all transportation modes. The Precise Plan provides the community and decision makers with a clear vision for the area with standards and guidelines for development of a multimodal district, including a circulation system that supports transit use, creates safe street and rail crossings for all users, and aligns the circulation network with City goals to support non-auto vehicle travel.

Comprehensive Modal Plan (AccessMV)

The City's Comprehensive Modal Plan (AccessMV) was approved on May 25, 2021 and provides a guide for development of the City's multimodal transportation network. The plan identifies pedestrian quality of service (PQOS) and Bicycle Level of Traffic Stress (BLTS) as metrics for assessing the existing and planned transportation network for all modes and identify needed improvements. Projects that increase the PQOS or BLTS score of a particular roadway would reduce the quality of service of pedestrian and bicycle facilities in the area. PQOS is influenced by a number of factors such as proximity to a variety of destinations and amenities, street connectivity and directness of routes to destinations, presence of a continuous network of pedestrian facilities, motor vehicle traffic speeds, and street widths and intersection conditions. BLTS is influenced by the number of through lanes or street width, posted speed limit or prevailing vehicle speeds, presence or type of bicycle facilities, presence of traffic signals, and the presence of crossing islands.

City of Mountain View Vehicle Miles Traveled Policy

Since certification of the Precise Plan EIR, the Mountain View City Council adopted a Vehicle Miles Traveled Policy on June 30, 2020, which replaces LOS with VMT as the metric for determining a significant transportation impact under CEQA consistent with SB 743. The City's VMT policy includes screening criteria for projects which are presumed to have a less than significant transportation impact. Specifically, the City's VMT policy states that projects would have a less than significant VMT impact and do not require further project-specific VMT analysis if the project: is located within a half mile of an existing major transit stop[202] or an existing stop along a high-quality transit corridor; has an FAR of greater than 0.75; has reduced parking compared to the maximum parking required by the City;

[202] According to the City's Multi-Modal Transportation Analysis Handbook, existing major transit stop include the Downtown Mountain View Caltrain station, San Antonio Caltrain station, light rail stations, and/or El Camino Real transit stops. Source: City of Mountain View. *Multi-Modal Transportation Analysis Handbook, Version 1.0.* February 2021. P 47. https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=33964

is consistent with Plan Bay Area; and does not replace affordable residential units with fewer units of moderate to high income.

5.16.1.2 *Existing Conditions*

Roadway Network

Regional access to the site is provided by US 101, SR 85, SR 237, and Central Expressway. Local access to the site is provided via Middlefield Road, Whisman Road, Maude Avenue, and Logue Avenue. These roadways are briefly described below.

- **US 101** is eight lanes wide with three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction in the vicinity of the project site. US 101 provides access to the project site via full interchanges at Ellis Street and SR 237.

- **SR 85** is a north-south freeway that begins at US 101, east of North Shoreline Boulevard, extends south towards San Jose, and terminates at US 101 east of the Silicon Valley Boulevard/Bernal Road interchange. SR 85 is six lanes wide (two mixed-flow lanes and one HOV lane in each direction) in the vicinity of the project site. SR 85 provides access to the project site via an interchange at SR 237.

- **SR 237** is a four to six-lane freeway within the vicinity of Sunnyvale that extends west to El Camino Real and east to I-880 in Milpitas. East of Mathilda Avenue, SR 237 has two mixed-flow lanes and one HOV lane in each direction. West of Mathilda Avenue, SR 237 has two mixed-flow lanes in each direction. SR 237 provides access to the project site via full interchanges at Middlefield Road and Maude Avenue.

- **Central Expressway** is an east-west, four to six-lane expressway. It begins at Trimble Road in the east, crosses Sunnyvale, extends westward and transitions into Alma Street. In the project area, Central Expressway has two eastbound lanes and two westbound lanes. Central Expressway is mostly grade-separated within Sunnyvale except at Mary Avenue.

- **Middlefield Road** is a mostly east-west four-lane arterial road[203] that runs parallel to US 101. It begins at the intersection of Central Expressway in Mountain View and traverses north then westward through Redwood City. Middlefield Road provides access to project site via its intersections with Ellis Street and Logue Avenue.

- **Maude Avenue** is an east-west arterial street between Logue Avenue in the west and Wolfe Road in the east. Maude Avenue has two lanes west of the SR 237 eastbound frontage road. Between the SR 237 eastbound frontage road and San Angelo Avenue, Maude Avenue has four lanes. Maude Avenue provides direct access to the project site.

[203] Arterial road is a high-capacity road that sits below freeways on the road hierarchy in terms of traffic flow and speed. Source: U.S. Department of Transportation, Federal Highway Administration. *Road Function Classification.* November 2000. https://safety.fhwa.dot.gov/speedmgt/data_facts/docs/rd_func_class_1_42.pdf

- **Moffett Boulevard** is a north-south arterial that extends northward from Central Expressway to US 101. South of Central Expressway, it becomes Castro Street that runs through Downtown Mountain View. The four-lane roadway has a raised median with left-turn pockets at intersections north of Middlefield Road and has a center turn lane with left-turn pockets at intersections south of Middlefield Road.

- **Whisman Road** is a north-south arterial between Fairchild Drive in the north and Dana Street in the south. Whisman Road has two lanes north of Middlefield Road with landscaped medians and left-turn pockets at intersections. South of Middlefield Road, Whisman Road is a four-lane road with landscaped medians beginning south of Pacific Drive.

- **Ellis Street** is a north-south four-lane arterial between Macon Road in the north and Middlefield Road in the south. Ellis Street has multiple landscaped medians and a two-way left turn lane at driveways with left turn pockets at intersections. Ellis Street provides direct access to the project site.

- **Logue Avenue** is a north-south two-lane local street[204] starting at Middlefield Road in the south and ends with a cul-de-sac north of Maude Avenue. Logue Avenue provides direct access to the project site.

- **Clyde Avenue** is a north-south two-lane local street starting at Maude Avenue in the south and continuing as Fairchild Drive in the north. Clyde Avenue provides direct access to the project site.

- **Mary Avenue** is a six-lane roadway south of Central Expressway and a four-lane roadway north of Central Expressway. Mary Avenue travels in the north-south direction. It is classified as a collector north of Central Expressway and an arterial south of Central Expressway. It extends from Almanor Avenue in the north to Homestead Road in the south.

- **Mathilda Avenue** is a six to eight-lane roadway. It is classified as an arterial. It extends from E. Caribbean Drive south past El Camino Real, where it transitions to Sunnyvale-Saratoga Road and extends south into Cupertino and Saratoga.

[204] Local streets are defined as those that provide primary access to residential areas, businesses, farms, and other local areas. Source: U.S. Department of Transportation, Federal Highway Administration. *Road Function Classification.* November 2000. https://safety.fhwa.dot.gov/speedmgt/data_facts/docs/rd_func_class_1_42.pdf

Existing Transit Facilities

Existing public transit services in the project vicinity are provided by the VTA and the Mountain View Transportation Management Association (TMA). VTA operates bus and light rail transit services in Santa Clara County, and the TMA provides free MVgo shuttle service between the Mountain View Transit Center and corporate campuses in the North Bayshore and East Whisman areas. The VTA bus and light rail transit routes and MVgo shuttle routes in the project vicinity and the bus/shuttle stops near the project site are shown on Figure 5.16-1.

VTA Bus Service

VTA Local Route 21 serves the project vicinity with bus stops in each direction on Maude Avenue west of Clyde Avenue, on Logue Avenue between Middlefield Road and Maude Avenue, and on Middlefield Road at Ellis Street. Route 21 also stops at the Mountain View Transit Center, approximately 2.0 miles from the project site. The Mountain View Transit Center provides connections to Caltrain, VTA light rail transit, several VTA bus routes (21, 40, and 52), MV community shuttle, and MVgo shuttle routes.

VTA Light Rail Transit

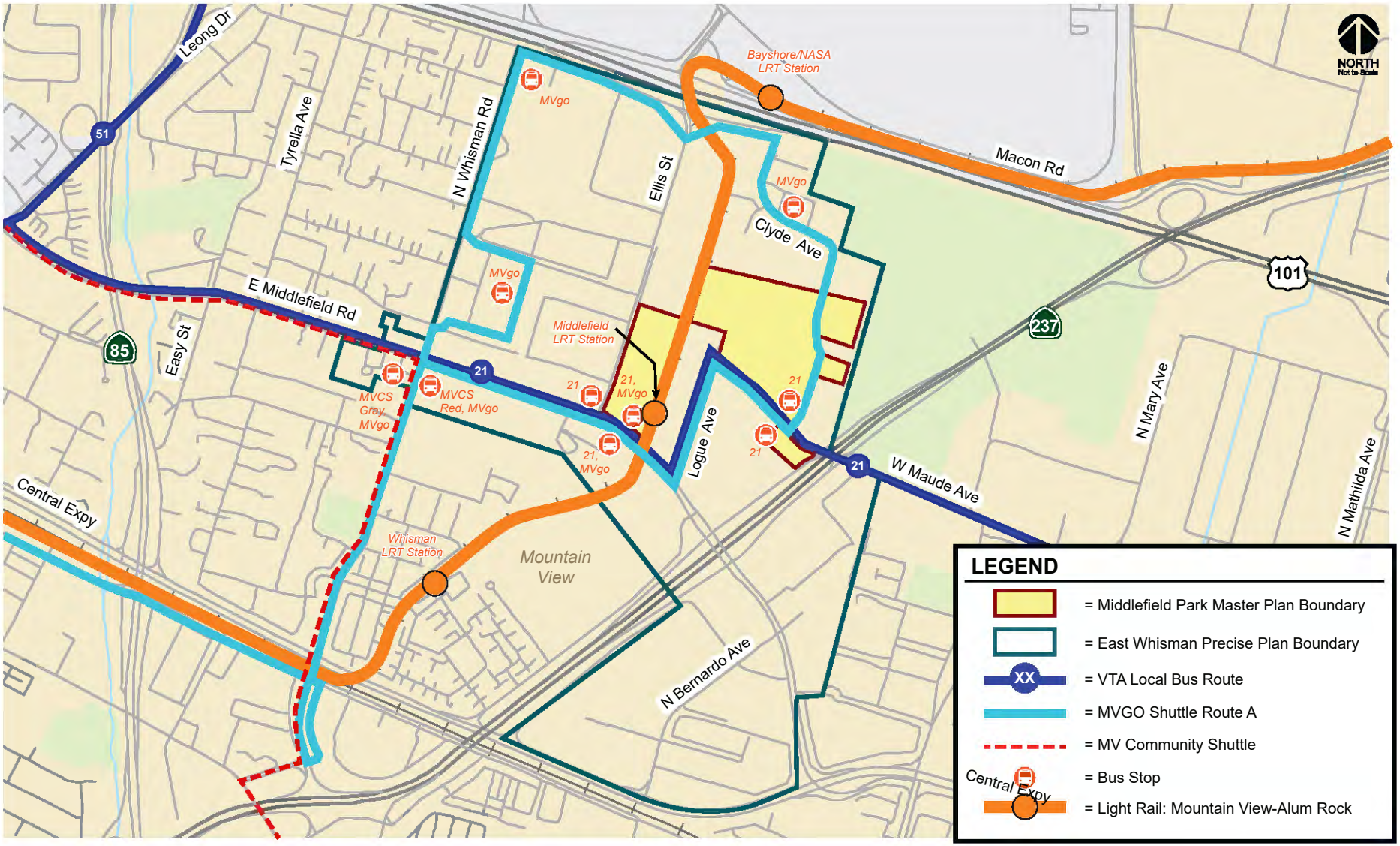
The light rail transit Orange Line serves the project area with the Middlefield Light Rail Station adjacent to the project site. The Orange Line travels between the Mountain View Transit Center and Alum Rock.

Mountain View Community Shuttle

The Mountain View Community Shuttle is a free shuttle service with 50 stops within Mountain View operating during the weekdays from 7 a.m. to 7 p.m. and on weekends and holidays between 10 a.m. and 6 p.m. The community shuttle has 50 stops, the closest of which is located at the intersection of Whisman Road and Middlefield Road approximately 0.3 miles west of the project site.

Mountain View Transportation Management Association Shuttles

The MVTMA operates the MVgo shuttle system. This shuttle system is provided through the collection of TMA member dues. MVgo operates four shuttle routes that provide service to employment areas from the Mountain View Transit Center. Three routes serve the North Bayshore area, and one route serves the East Whisman area. The shuttles are timed to meet Caltrain arrivals during the a.m. and departures during p.m. commute periods. MVgo shuttle Route A provides service to the project area, with two bus stops within the vicinity of the project site, with the closet at the VTA Middlefield Station.



Source: Hexagon Transportation Consultants, Inc., March 11, 2022.

EXISTING TRANSIT FACILITIES

FIGURE 3.16-1

Existing Bicycle Facilities

The bicycle facilities that exist within one mile of the project site (see Figure 5.16-2) include a multi-use trail (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes/boulevards (Class III bikeway).[205]

Striped bike lanes are present along the following street segments:

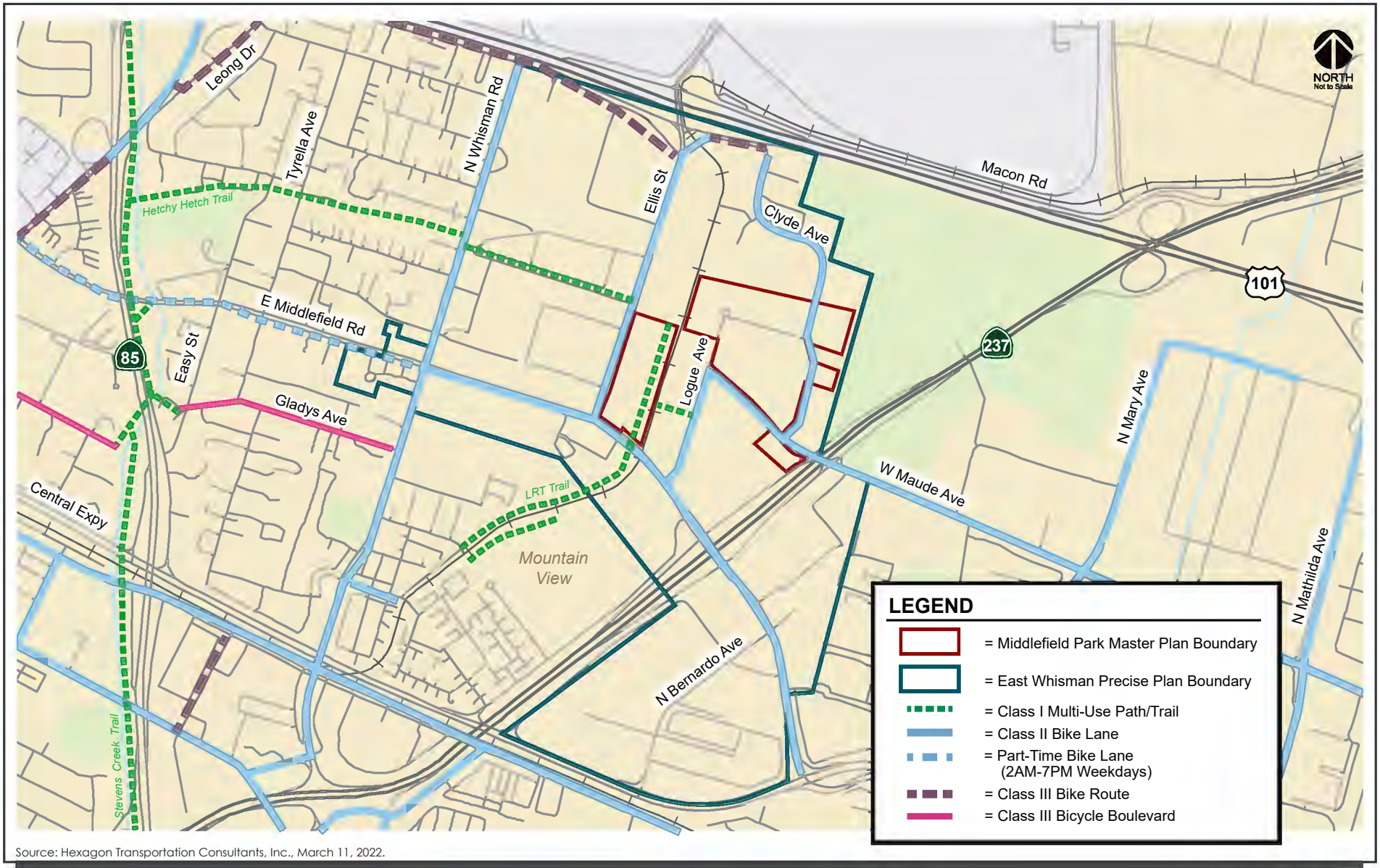
- Logue Avenue between Middlefield Road and Maude Avenue
- Maude Avenue, except for a short segment between Clyde Avenue and SR 237 eastbound frontage road
- Part time on Middlefield Road west of Whisman Road, between Old Middlefield Way and Bernardo Avenue
- Whisman Road, for the entire street
- Ellis Street, for the entire street
- Clyde Avenue, for the entire street
- Evelyn Avenue, east of Hope Street
- Mary Avenue, for the entire street
- Mathilda Avenue, south of Ahwanee Street
- Moffett Boulevard, north of Leong Drive

The City's Bike Map shows that Leong Drive and Fairchild Drive are designated as existing bike routes, however, there are no signs or sharrows on either street to indicate a bike route. The City's Bike Map shows that Central Avenue and Gladys Avenue are designated as existing bike boulevards and these streets are designated with signs.

Other bicycle facilities include:

- **Hetch Hetchy/TOD Trail.** The Hetch Hetchy/TOD Trail extends from Ellis Street and connects to the Stevens Creek Trail. The trail can be accessed from Ellis Street, approximately 65 feet west of the site.
- **Stevens Creek Trail.** The Stevens Creek Trail extends from the Bay, under US 101 and Middlefield Road, and ends at Dale Avenue/Heatherstone Avenue. The trail can be accessed from Easy Street at the Gladys Avenue intersection, approximately one mile from the project site, or from the Hetch Hetchy/TOD Trail.
- **A VTA Multi-Use Path** also exists along the west side of the light rail tracks between the northwest corner of the proposed Building O2 and Whisman Station. The path can be accessed by Middlefield Road and by Ellis Street and Logue Avenue through pedestrian walkways that run between these streets and the Middlefield Light Rail Station.

[205] Bike paths or multi-use trails are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are signed bike routes where bicyclists share a travel lane with motorists. Bike boulevards are modified bike routes with additional treatments that offer convenient and efficient through-routes for bicyclists of all skill levels.



Source: Hexagon Transportation Consultants, Inc., March 11, 2022.

EXISTING BICYCLE FACILITIES

FIGURE 5.16-2

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks, which are present along most project area roadways, and at signalized and unsignalized study intersections. Pedestrian signal heads and push buttons are present at the signalized study intersections. Crosswalks are present along the north leg of the unsignalized study intersection of Logue Avenue and Maude Avenue and along the north leg of Clyde Avenue and Maude Avenue. A high-visibility midblock crosswalk curb extension exists on Logue Avenue between Middlefield Road and Maude Avenue to access the Middlefield Light Rail Station and a midblock crosswalk on Clyde Avenue less than 100 feet north of the plan area boundary. Two enhanced midblock crosswalks with rapid rectangular flashing beacons exist on Ellis Street: one less than 100 feet north of the project site and another adjacent to the project site about 460 feet north of Middlefield Road. Sidewalks are missing on the north side of Maude Avenue between the SR 237 westbound frontage road and Macara Avenue and on the south side of Maude Avenue between Logue Avenue and the SR 237 westbound frontage road. Sidewalks are also missing along the west side of Logue Avenue near the cul-de-sac.

Within a typical walking distance (a half mile or 10 minutes), pedestrian facilities are present between the project site and the surrounding land uses, including bus stops in the area.

5.16.2 Impact Discussion

For the purpose of determining the significance of the project's impact on transportation, would the project:

1) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4) Result in inadequate emergency access?

5.16.2.1 *Project Impacts*

Impact TRN-1:	**Both Project Options:** The project (under either option) would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Same Impact as Approved Project [Less than Significant Impact])**

Roadway Network

The Precise Plan EIR found that implementation of the Precise Plan (which includes development of the project under either option) would result in LOS deficiencies under existing LOS policies, improvements to address select deficiencies would be implemented, and select deficiencies would be significant and unavoidable.[206] However, as noted above, consistent with SB 743, beginning on July

[206] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 224.

1, 2020, impacts to LOS can no longer constitute a significant impact under CEQA.

The project includes the construction of six new service streets and two project driveways to provide access to parking for each adjacent building, which is consistent with the standards and design requirements of the Precise Plan. Additionally, the project includes the relocation and reconstruction of the terminus of Logue Avenue as an interim improvement until the remainder of Street D in the Precise Plan can be constructed at a future time. This reconstruction would be required to comply with Chapter 27 of the City Code, as well as meet fire turnaround access per the Fire Code.

Pedestrian and Bicycle Policy

The Precise Plan EIR concluded that future development and transportation improvements consistent with the Precise Plan would not conflict with a program plan, ordinance, or policy addressing bicycle lanes, and pedestrian facilities. As described in Section 3.2 Project Description, the project (under either option) includes pedestrian improvements such as construction of new multi-modal paths throughout the site; dedication of park land for a future bicycle and pedestrian bridge overcrossing of the light rail tracks to extend an existing trail; installation of new midblock crossings and enhancements to existing crossings; construction of wider sidewalks with landscaping along project frontages, new driveways, new service streets and paseos; and bicycle improvements such as new buffered bike lanes on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, and protected bike lanes on Middlefield Road. These improvements are consistent with the planned improvements, standards, and guidelines for pedestrian and bicycle facilities included in the Precise Plan. The project is a mixed-use development that would increase the variety and density of uses within walking distance of each other and construct pedestrian and bicycle improvements, resulting in an overall improvement of PQOS and BLTS on area roadways. For these reasons, the project (under either option) would not conflict with the Precise Plan or Access MV policies addressing bicycle and pedestrian facilities.

Transit Facilities

The Precise Plan EIR identified a significant and unavoidable effect on transit vehicle operations at intersections with a deficient LOS (see Precise Plan EIR Impact TRA-3) and found that transit operational improvements such as signal coordination and transit vehicle preemption could reduce the magnitude of congestion on transit operations and improve the overall reliability of transit in congested areas.[207] However, these improvements would not fully mitigate these impacts to a less than significant level. Pursuant to SB 743, LOS is no longer a significant impact under CEQA.

Additionally, the Precise Plan EIR identified that a significant impact associated with increased light rail service delay due to gate operations at the proposed Street C at-grade crossing of the light-rail tracks between Ellis Street and Logue Avenue (see Precise Plan EIR Impact TRA-4). The Precise Plan includes mitigation measure EIR MM TRA-4.1, requiring the removal of the Street C from the Precise Plan. Consistent with Precise Plan EIR mitigation measure EIR MM TRA-4.1, Street C was removed from the Precise Plan and replaced with a grade-separated multi-use path. As noted in Section 3.2.7 Site Access, Circulation, and Parking, the proposed project (under either option) would include dedication of land for future development of bicycle/pedestrian overcrossing of the light rail tracks between Ellis Street and Logue Street. With implementation of the proposed project (under either

[207] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 212.

option) land would be dedicated for a development of a future grade-separated crossing of the light rail tracks as described in EIR MM TRA-4.1, and impacts associated with light rail transit vehicle delay would be eliminated because pedestrian and vehicle traffic could cross the light rail tracks without disrupting light rail service or increasing delays.

As discussed in Section 5.16.1 Environmental Setting, the project area is served by VTA Route 21 and MVgo Route A, with the closest bus stops located on Middlefield Road and Maude Avenue. The site is also served by Middlefield Light Rail Station which is considered a major transit stop. The project (under either option) would enhance and provide shorter access to the transit stops by providing pedestrian and multi-use paths within the Precise Plan area and enhancing a bus stop on project frontage with a shelter and benches (refer to Section 3.2 Project Description). Google currently operates an existing GBus employee shuttle system with an existing stop within the Quad office campus at 369 North Whisman Road/464 Ellis Street, located on the west side of Ellis Street. The project (under either option) would add a second GBus stop in the plan area within the proposed service street between Buildings O3 and O4 to better serve the project.

In order to accommodate a fire and emergency access lane for the project and accommodate a new midblock crossing on Middlefield Road, the project would be required to modify the existing VTA bus stop on Middlefield Road along the project frontage. The preferred design has not been selected by VTA, CPUC, or the City and would require permits and approval from all three parties. The bus stop improvements would include:

- A new midblock pedestrian crossing to connect the north and south ends of an existing VTA multi-use path along the west side of the light rail tracks;
- A new bus shelter and bench;
- A driveway with bollards to restrict access to emergency vehicles;
- A 120-foot in-lane bus stop or bus duck-out (out-of-lane) stop (to be decided)*;*
- A raised protected bike lane along the bus stop or buffered on-street bike lane (to be decided)*;*
- A bus island for loading/unloading passengers (to be decided); and
- Maintaining the existing stop location or shifting the stop westward toward Ellis Street intersection (to be decided).

The General Plan and Precise Plan include policies to encourage an increase in the City's transit ridership, decrease dependence on motor vehicles, and reduce transit delays. The City and VTA have not established policies or significance criteria related to transit vehicle delay. An analysis of the project's contribution to the transit vehicle delay disclosed in the Precise Plan EIR was completed. According to the MTA, the project (under either option) would generate approximately 59 new riders during the a.m. peak hour and 71 new riders during the p.m. peak hour. However, because the applicant operates a shuttle service for employees, the number of office workers that would take VTA transit would likely be minor and the increased transit ridership from the project (under either option) could be accommodated by the existing transit routes. To assess the project's effect on transit vehicle delay, the delay experienced by each route running through the study intersections was estimated based on the average vehicle delay that is calculated as part of the intersection level of service analysis. The results show the project would result in a less than 60 second delay per transit vehicle for the bus routes

in the study area.[208] Therefore, consistent with the Precise Plan EIR, the project would result in increased transit vehicle delay at intersections with identified LOS deficiencies, however, implementation of project (which is consistent with the Precise Plan development assumptions) would not disrupt existing or interfere with planned transit facilities and services. Based on the above discussion, the project would result in the same impact to transit facilities as disclosed in the Precise Plan EIR.

In summary, the project would be consistent with roadway, pedestrian, bicycle, and transit programs, plans, ordinances, and policies disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact TRN-2:	**Both Project Options:** The project (under either option) would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Same Impact as Approved Project [Significant, Unavoidable Impact])**

The Precise Plan EIR identified a project-level and cumulative-level VMT impact due to Precise Plan project-generated VMT on both a citywide and countywide basis. Project-level VMT per service population was calculated in the Precise Plan EIR to be 35.93. The MPMP project's VMT was included in the VMT calculation in the Precise Plan EIR for the Precise Plan as a whole. For this reason, the project would contribute to the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Significant, Unavoidable Impact])**

As noted in Section 5.16.1 Environmental Setting above, since adoption of the Precise Plan and certification of the Precise Plan EIR, City Council adopted the Mountain View VMT Policy, which establishes screening criteria for developments that are expected to cause a less than significant transportation impact under CEQA and for which further VMT analysis is not required. Per CEQA Guidelines Section 15088.5, adoption of new policies and/or regulations is not considered substantial new information requiring recirculation of the EIR because it does not result in a new significant environmental impact, increase the severity of an environmental impact, or alter an existing mitigation measure or alternative. Additionally, projects approved prior to adoption of the Mountain View VMT Policy (such as the Precise Plan, of which the current project is a part) are considered exempt from the new policy. Nevertheless, the project (under either option) is consistent with the VMT policy as described below.

The site is located within a half-mile of the Middlefield Light Rail Station (which is considered a major transit stop), would have a total FAR of 1.46 (which is greater than 0.75 FAR), and would provide fewer parking spaces than required by the Precise Plan. Consistent with Plan Bay Area, the project (under either option) would provide more housing and pedestrian and bicycle improvements within the Precise Plan area, be within walking distance to Middlefield Light Rail Station and implement a TDM program to promote alternative modes of transportation and reduce vehicle trips and GHG emissions. The project (under either option) would also construct affordable housing units on two sites with no existing housing. For these reasons, the project's individual VMT (under either option) would be consistent with the Mountain View VMT Policy and impacts would be less than significant.

[208] Hexagon Transportation Consultants, Inc. *Middlefield Park Master Plan MTA.* April 13, 2022.

While the MPMP project would be consistent with the City's recently adopted VMT policy and thresholds to comply with SB 743, because this EIR analysis is tiering off the prior Precise Plan EIR, this analysis concludes that the MPMP project would contribute to the same significant unavoidable VMT impact as identified in the Precise Plan EIR.

Impact TRN-3:	**Both Project Options:** The project (under either option) would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR concluded that future development under the Precise Plan would not result in project- or cumulative-level impacts due to hazards from geometric design features because the Precise Plan would result in greater connectivity of the street and multimodal network and all proposed structures would be reviewed by MVFD for compliance with emergency access and design requirements under the City's fire code.

Site access is described in detail in Section 3.2.7 Site Access, Circulation, and Parking and shown on Figure 3.2-7. Access to the site under either project option would be provided via multiple service streets and driveways on Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. The proposed driveway/service street access (under either option) was evaluated and found to meet the design requirements identified in the City's zoning ordinance and sight distance requirements. The project (under either option) would also include multiple service roads. All of the proposed service roads would be designed in accordance with the Precise Plan requirements, all private driveways would be designed per City Code Section 36.32.80 (e), and the Logue Avenue cul-de-sac reconstruction would be done in accordance with Chapter 27 and Fire Code requirements. The proposed driveways and service roads, therefore, would meet all required standards and not create design hazards (refer to Appendix H for more detail). Additionally, the existing public street network layout is not being modified by the project (under either option).

The project (under either option) proposes office, residential, retail, civic/community uses and open space consistent with the mix of uses envisioned for the area in the Precise Plan. The project (under either option) does not propose a new use or a use that is incompatible with the existing mix of uses in the project vicinity. For these reasons, with implementation of the recommendations outlined in the project-specific MTA (which includes relocating some of the loading (flex) zones to service roads and removing on-street parking on the north side of Maude Avenue, the east side of Clyde Avenue, and the east side of Logue Avenue), the project (under either option) would not increase hazards due to a geometric design feature or incompatible use (refer to Appendix H). This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TRN-4:	**Both Project Options:** The project (under either option) would not result in inadequate emergency access. **[Same Impact as Approved Project (Less than Significant Impact)]**

As shown in Figure 3.2-8 Conceptual Circulation Plan, emergency vehicles would be able to access the site from Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, Clyde Avenue, all project driveways and service roads, and an emergency fire lane/multi-use path along the west side of the Middlefield Light Rail Station under either project option.

According to the Precise Plan, if emergency vehicle access is required for residential paseos and multi-use paths, a greenway or multi-use path design typology should be used. Additionally, buildings greater than 30 feet in height require a minimum of two emergency vehicle access roads. All proposed buildings would be greater than 30 feet in height, and all buildings would have at least two emergency vehicle access roads. In addition, the final site design would be reviewed by the MVFD for consistency with applicable fire department standards. For these reasons, the project (under either option) would not result in inadequate emergency access. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project (Less than Significant Impact])**

5.16.3 Non-CEQA Effects

Vehicle Queuing

Although the City does not have an adopted queuing significance threshold, a vehicle queuing analysis was completed at project driveways and at key intersections in the project vicinity and included here for informational purposes. The queuing analysis at study intersections under background plus project conditions found the following movements and peak hours would exceed the storage capacity of the turn lane:.

- Ellis Street and Fairchild Drive, southbound left turn lane during a.m. peak hour
- Mathilda Avenue and Maude Avenue, northbound left turn during a.m. peak hour
- Whisman Road and Middlefield Road, westbound left turn during p.m. peak hour
- Ellis Street and Middlefield Road, eastbound left turn during a.m. and p.m. peak hour
- Logue Avenue and Middlefield Road, eastbound left turn p.m. peak hour
- Clyde Avenue and Maude Avenue, southbound movement during p.m. peak hour

Pursuant to SB 743, LOS and corresponding vehicle queuing are no longer a significant impact under CEQA, therefore, improvements that increase vehicle queuing capacity are not required under CEQA. In addition, as noted above, the City of Mountain View does not have adopted significance thresholds for assessing vehicle queuing impacts. The queuing analysis for these movements is discussed in detail in Appendix H. The project can, however, pay a proportional fair-share contribution to the necessary roadway improvements as a condition of approval. Otherwise, the City is currently undergoing a nexus study for the East Whisman Precise Plan to determine a new development impact fee that contributes towards roadway and other transportation improvements in the area, anticipated to be considered by the City Council in mid-2022. If adopted, the project could provide proportional fair-share with payment of the impact fee.

Bicycle Parking

The project (under either option) proposes to provide bicycle parking in accordance with the bicycle parking requirements identified in the Precise Plan. The requirements for neighborhood commercial uses would apply to the proposed civic/community uses. Table 5.16-1 summarizes the Precise Plan bicycle parking requirements. The project would meet the requirements by providing 2,569 long-term and 362 short-term bicycle parking spaces.

Table 5.16-1: Required Bicycle Parking

Land Use	Short-Term		Long-Term	
	Requirement	Proposed	Requirement	Proposed
Residential	1 space per 10 units (190 spaces)	190	1 space per unit (1,900 spaces)	1,900
Office	1 space per 20,000 square feet or minimum 4 spaces, whichever is greater (66 spaces)	132	1 space per 2,000 square feet or minimum 4 spaces, whichever is greater (659 spaces)	659
Neighborhood Commercial Uses (Retail/Community/Civic Uses)	4 per 5,000 square feet or minimum 2 spaces, whichever is greater (40 spaces)	40	1 per 5,000 square feet or minimum 2 spaces, whichever is greater (10 spaces)	10
Total	296 spaces	362	2,569 spaces	2,569

Source: City of Mountain View. *East Whisman Precise Plan.* November 2019. P. 90.

Vehicle Parking

The project site is located in a transit proximity area and within a half-mile of the Middlefield Light Rail Station. Based on the State Density Bonus Law, the project can provide a maximum of 0.5 spaces per affordable unit within Buildings R4 AFF and R6 AFF.[209] The remaining residential and non-residential uses proposed are required to meet the residential and commercial parking requirements included in the Precise Plan, unless a parking study has been prepared demonstrating an alternative parking ratio is sufficient. Table 5.16-2 summarizes the project's maximum required and proposed vehicle parking ratios. Given the project's proposed mixed-use design, proximity to the Middlefield Light Rail Station, TDM programs, the project proposes reduced parking supply ratios as shown in Table 5.16-2.

[209] Per Assembly Bill 1763 (Density Bonus Law), if a development is located within one-half mile of a major transit stop, as defined in Section 2115 of the Public Resources Code, and there is unobstructed access to major transit stops from the development, the parking ratio for the development shall not exceed 0.5 spaces per unit.

Table 5.16-2: Maximum Vehicle Parking[1]			
Land Use	**Required Precise Plan Parking**	**Proposed Parking**	**Parking Spaces Provided**
Office	Max. 2.9 spaces per 1,000 gross square feet (Max. 3,819 spaces)	2.0 spaces per 1,000 gross square feet	2,634 spaces
Retail, restaurants, fitness and other permitted uses in neighborhood commercial areas (includes community and civic uses)	Min. 4 spaces per 1,000 gross square feet (Min. 200 spaces)	3.68 spaces per 1,000 gross square feet	184 spaces
Residential (Market Rate)	Studio/1 Bed - Max. 1 space per unit 2+ Bed – Max. 2 space per unit (Max. 2,120 spaces)	1 space per unit	1,520 spaces
Residential (Affordable)	0.5 spaces per unit (Max. 190 spaces)		190 spaces
[1] The proposed parking could be reduced with the implementation of additional parking strategies such as unbundled and shared parking. This EIR assumes the maximum parking proposed.			

5.16.4 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
TRN-1:	**Both Project Options:** The project (under either option) would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities.	Yes	LTS	None	LTS
TRN-2:	**Both Project Options:** The project (under either option) would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Yes	S	None	SU
TRN-3:	**Both Project Options:** The project (under either option) would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Yes	LTS	None	N/A
TRN-4:	**Both Project Options:** The project (under either option) would not result in inadequate emergency access.	Yes	LTS	None	N/A
Abbreviations: S – Significant, SU – Significant, Unavoidable, LTS – Less than Significant					

5.17 TRIBAL CULTURAL RESOURCES

5.17.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for tribal cultural resources has not substantially changed since the certification of the Precise Plan EIR.

5.17.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

5.17.1.2 *Existing Conditions*

On May 28, 2021, Tamien Nation requested notification from the City of all non-exempt projects within the City of Mountain View. The tribal representatives for the Tamien Nation was sent the Notice of Preparation for the proposed project on September 30, 2021. Consultation was requested by Tamien Nation on October 28, 2021 and a subsequent meeting was held between staff and the Tamien Nation Chairwoman on November 22, 2021. Following consultation, subsequent email correspondence was received by the City from Tamien Nation on December 20, 2021. In addition, the City completed a Sacred Lands File Search for the site on November 2, 2021. No known tribal cultural resources were identified on the project site through the file search or consultation with Tamien Nation. The consultation was concluded on January 12, 2022, with both the City and Tamien Nation agreeing the site is archeologically sensitive and cultural sensitivity training and monitoring during excavation phases would be required.

5.17.2 Impact Discussion

For the purpose of determining the significance of the project's impact on TCRs, would the project cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) 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)?
2) 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.

5.17.2.1 *Project Impacts*

Impact TCR-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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). **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that build out of the Precise Plan (which included the project under either option) would result in less than significant impacts to TCRs with implementation of standard conditions of approval identified under Impact CUL-2 in Section 5.4 Cultural Resources.

As noted in 5.17.1 Environmental Setting above, no known TCRs are located on-site. As noted in Section 5.4 Cultural Resources under Impact CUL-2, the project would implement the same conditions of approval as identified in the Precise Plan EIR, with the addition of cultural sensitivity training and monitoring during excavation (as agreed upon with Tamien Nation), to reduce potential impacts to TCRs, should they be identified during ground disturbing activities, to a less than significant level. This is the same impact as disclosed in the Precise Plan EIR.[210] **(Same Impact as Approved Project [Less than Significant Impact])**

[210] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp 256 – 257.

Impact TCR-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. **(Same Impact as Approved Project [Less than Significant Impact])**

Refer to discussion under Impact TCR-1. This is the same impact as disclosed in the Precise Plan EIR.[211] **(Same Impact as Approved Project [Less than Significant Impact])**

5.17.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
TCR-1	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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).	Yes	LTS	None	N/A
TCR-2	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant.

[211] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 255.

5.18 UTILITIES AND SERVICE SYSTEMS

The following discussion is based, in part, on a Utilities Impact Study (UIS) completed by Schaaf & Wheeler. This report is attached as Appendix I.

5.18.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for utilities and service systems has not substantially changed since the certification of the Precise Plan EIR.

5.18.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, including water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Mountain View adopted its most recent UWMP in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Senate Bill 610

SB 610 requires projects subject to CEQA to comply with Part 2.10 of the Water Code and demonstrate the availability and reliability of water supplies required to serve their projected demand. The bill also requires that Urban Water Management Plans include service reliability assessments.

California Green Building Standards Code

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

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

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to utilities impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 1.3	**Utilities for new development.** Ensure adequate utility service levels before approving new development.
INC 1.5	**Utility service.** Coordinate with all utility providers to ensure safe and adequate utility services.
INC 5.2	**Citywide water conservation.** Reduce water waste and implement water conservation and efficiency measures throughout the city.
INC 5.3	**Water reuse.** Remove barriers and provide guidance for the use of rainwater and graywater as alternative water supplies.
INC 8.4	**Runoff pollution prevention.** Reduce the amount of stormwater runoff and stormwater pollution entering creeks, water channels and the San Francisco Bay through participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program.
INC 8.7	**Stormwater quality.** Improve the water quality of stormwater and reduce flow quantities.
INC 11.1	**Waste diversion and reduction.** Meet or exceed all federal, state and local laws and regulations concerning solid waste diversion and implementation of recycling and source

Policy	Description
	reduction programs.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 128, 130-132.

East Whisman Precise Plan

The Precise Plan includes utility-related standards and guidelines for new construction. These include meeting indoor and outdoor water performance standards as defined by LEED BD+C and CalGreen, installing dual plumbing for potable and recycled water use in all new construction per City codes, and connecting new construction to recycled water infrastructure when the recycled water system is adjacent to the property.

5.18.1.2 *Existing Conditions*

Water Supply and Demand

The City of Mountain View provides water service to the project site. The City is the water retailer for the area and purchases water from two wholesale water suppliers, the SFPUC and Valley Water. In 2020, the City's water supply production was 84 percent SFPUC, 10 percent Valley Water, two percent groundwater, and four percent recycled water. The City's existing water supply is 10,456 acre-feet per year (AFY) and the City's water demand is approximately 10,000 AFY.[212] The UWMP has a projected citywide water demand of 12,058 AFY in 2025 and 14,163 AFY in 2045.[213]

The existing industrial/office land uses in the project site have an existing water demand of approximately 61,736 gallons per day (gpd) or 69 AFY.[214]

Water System and Fire Flow

The City's municipal water system services three pressure zones and consists of three wholesale water turnouts, four reservoirs, three pump stations, four active groundwater supply wells, and buried pipelines. The City serves 17,543 potable water service connections and 58 active recycled water service connections. The project is located in pressure zone two. The project site is served by 12-inch water lines in Ellis Street, East Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue.

Wastewater Treatment/Sanitary Sewer System

The City of Mountain View maintains its own wastewater collection system. Sanitary and storm drains in the City are operated and maintained by the Wastewater Section of the Public Works Department. The City pumps its wastewater to the Palo Alto Regional Water Quality Control Plant (PARWQCP) for treatment. The PARWQCP has an overall 40 mgd average annual treatment capacity. The City has an average annual flow treatment allocation of 15.1 mgd at the PARWQCP. In 2020, approximately 6.9 mgd of wastewater from Mountain View was collected and treated by the PARWQCP.[215] Compared to the average wastewater flow of previous years (18.4 mgd in 2015 and 22.0 mgd in 2010),

[212] City of Mountain View. *2020 Urban Water Management Plan*. June 2021. P. 34.
[213] Ibid. P. 18.
[214] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022. Pp. 2-4.
[215] City of Mountain View. *2020 Urban Water Management Plan.* June 2021. P. 31.

the average wastewater flow in 2020 was substantially lower.[216],[217] This decrease could be the result of the COVID-19 pandemic, which led to fewer people traveling to Mountain View for work and working remotely instead. The project site is served by 10- to 18-inch sewer mains in Ellis Street, Logue Avenue, and Clyde Avenue.

Existing uses on the project site generate approximately 60,530 gallons per day of wastewater.[218]

Storm Drain System

The City of Mountain View Public Works Department operates and maintains the storm drainage system in the City. As discussed in Section 5.9 Hydrology and Water Quality, the project site consists of 83 percent impervious (or 31.7 acres) and 17 percent of pervious surfaces (or 6.5 acres). Runoff from the project site flows into 12- to 36-inch storm drain lines in the surrounding streets, which flows to the west to Stevens Creek and eventually the San Francisco Bay.

Solid Waste

Solid waste collection and recycling services for residents and businesses in Mountain View are provided by Recology Mountain View. Once collected, solid waste and recyclables are transported to the SMaRT Station in Sunnyvale for sorting, and commercial compostable are transported to a composting facility in Vernalis, California. Non-recyclable waste is transported and landfilled at Kirby Canyon Sanitary Landfill in south San José. Kirby Canyon Landfill has an estimated remaining capacity of approximately 14.6 million tons, and a closing date of approximately January 1, 2071.[219]

Telecommunications Systems

The project site is served by existing phone and electrical services. Phone service is provided to the site by AT&T, and electrical service is provided by Pacific Gas and Electric (PG&E) and/or SVCE.

5.18.2 Impact Discussion

For the purpose of determining the significance of the project's impact on utilities and service systems, would the project:

1) 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, the construction or relocation of which could cause significant environmental effects?
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local

[216] City of Mountain View. *2015 Urban Water Management Plan.* June 2016. P. 40.
[217] City of Mountain View. *2010 Urban Water Management Plan.* June 2011. P. 5-10.
[218] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022. Pp. 4-5.
[219] Azevedo, Becky. Waste Management Technical Manager. Personal communications. December 27, 2021.

infrastructure, or otherwise impair the attainment of solid waste reduction goals?

5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

5.18.2.1 *Project Impacts*

Impact UTL-1:	**Both Project Options:** The project 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, the construction or relocation of which could cause significant environmental effects. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that future large-scale development allowed under the Precise Plan could result in impacts to existing water, sewer, and storm drainage infrastructure and require upsizing and/or improvements to nearby water distribution, sewer, and storm drainage infrastructure. The Precise Plan EIR concluded that this impact would be reduced to a less than significant level with payment of necessary fees, compliance with the standards and guidelines of the Precise Plan, and implementation of Precise Plan EIR MM UTL-1.1, listed below.[220]

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM UTL-1.1: Both Project Options: The City shall require, determined on a project-by-project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.

To comply with Precise Plan EIR MM UTL-1.1, a site-specific analysis UIS was prepared by Schaaf & Wheeler for the project. The results of the study are summarized below and discussed in detail in Appendix I.

Project

Water System and Fire Flow

The project (under either option) would have a total water demand of approximately 384,460 gpd and a fire flow requirement of 1,500 gallons per minute (gpm), an increase of 322,697 gpd above existing conditions.[221] The total water demand includes both potable and non-potable water demands. Under the project (without District Utilities System Option), in order to serve the project's non-potable

[220] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 264.

[221] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022. Table 2-1: Proposed Building Estimated Water Demand. Pp. 2-2 through 2-3.

demands with non-potable recycled water, the City's existing recycled water system would need to be extended to the project site.

As mentioned in 5.18.1.2 Existing Conditions, the project is located in pressure zone 2, which is supplied by two SFPUC turnouts. The UIS included modeling which determined that demand in pressure zone 2 can be sufficiently supplied by the turnouts and that the additional project demand would not impact the City's ability to meet the total system demand.[222]

Furthermore, the SWRCB Division of Drinking Water requires storage equal to eight hours of maximum day demand plus fire flow storage in each pressure zone. The existing maximum active water storage in the City is 17 million gallons (MG) and the City operates with an operational storage of 14.3 MG. Thus, the City has the storage volume available to meet the SWRCB Division of Drinking Water requirements and the project (without District Utilities Option) would not require relocation or construction of new or expanded water facilities resulting in significant environmental impacts beyond what was previously disclosed in the General Plan EIR and Precise Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

Wastewater/Sewer System

The project (without District Utilities System Option) would incrementally increase wastewater generation on-site by approximately 231,170 gpd. Based on the UIS, the sewer system does not have sufficient capacity to support the estimated increase in wastewater flow from the project (without District Utilities System Option), consistent with the analysis in the Precise Plan EIR. However, implementation of improvements identified in the 2030 General Plan Update Utility Impact Study and Precise Plan Utility Impact Study included upsizing of the 10-inch pipe along Ellis Street to 15-inches, upsizing the 10-inch pipe between Ellis Street and Logue Avenue to 15-inches, upsizing the 18-inch pipe along Fairchild Drive to 21-inches, and upsizing the 10-inch pipe between Ellis Street and Logue Avenue to 15-inches. With these improvements, there would be sufficient capacity to support the increased wastewater generated by the project (without District Utilities Systems Option). The project (without District Utilities System Option) would pay the impact fee toward these planned improvements. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[223] The environmental impacts associated with construction of these improvements were previously disclosed in the General Plan EIR and the Precise Plan EIR.[224, 225] For these reasons, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects beyond what was previously disclosed in the Precise Plan EIR and General Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

[222] Ibid.
[223] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022.
[224] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 265.
[225] City of Mountain View. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR.* September 2012. P. 528.

Stormwater Drainage

The project would pay impact fees to fund stormwater drainage improvements included as part of the Capital Improvement Projects (CIPs) and improvements identified in the 2030 General Plan Update Utility Impact Study to provide adequate storm drain service for the buildout of the General Plan (which includes the project under either option). The environmental impacts associated with construction of these improvements were previously disclosed in the General Plan EIR and the Precise Plan EIR. The project (without District Utilities System Option) would, therefore, pay a proportional utility impact fee toward these planned improvements. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[226] Thus, the project would not require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects beyond those already disclosed in the Precise Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

Electric Power, Natural Gas, and Telecommunications

The project (without District Utilities System Option) would connect to existing electric power, natural gas, and telecommunications lines. The project would be adequately served and existing overhead facilities would be relocated and undergrounded. The existing nitrogen gas line that runs approximately 50 feet south of the SFPUC Hetch-Hetchy right-of-way would be relocated to accommodate the proposed buildings. The project (without District Utilities System Option) would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects and have a less than significant impact. This is the same impact as identified in the Precise Plan EIR.

For the reasons discussed above, the project (without District Utilities Option) 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, the construction or relocation of which could cause significant environmental effects. A site-specific UIS was prepared for the project consistent with Precise Plan EIR MM UTL-1.1, which confirmed the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated**])

Project with District Utilities System Option

The project with District Utilities System Option would construct a private district utilities system with underground utility lines to serve buildings within the MPMP with wastewater, recycled water, thermal energy, and electric power service.

Water System and Fire Flow

As discussed above, the total water demand for the project (under either option) would be approximately 384,460 gpd and have a fire flow requirement of 1,500 gpm. Fire water service would be supplied by the existing City system. The total water demand includes both potable and non-potable water demands. Operation of the on-site wastewater treatment plant under the project with District

[226] Ibid.

Utilities System Option would offset water demands by up to 250,000 gpd, as all of the project's non-potable water demands would be met using non-potable recycled water produced onsite, resulting in a lower potable water demand than the project without the District Utilities System Option. The net increase in potable water demand for the project with District Utilities System Option would be approximately 72,697 gpd compared to existing conditions on-site.

Because the project with District Utilities System Option would result in a lower potable water demand than the project without the District Utilities System Option, and the UIS determined that adequate water pressure and storage are available to meet the added demand of the project without the District Utilities System Option, the project with the District Utilities System Option would not require relocation or construction of new or expanded water facilities resulting in significant environmental impacts. Therefore, impacts would be less than significant, and lesser than those disclosed in the Precise Plan EIR.

Wastewater/Sewer System

Since the CUP would allow for direct treatment of wastewater at the project site, the project with District Utilities System Option would result in a net negative demand of -18,830 gpd on the City's wastewater system. With a net decrease in demand, the sewer system would have sufficient capacity downstream and would not require upsizing of pipes[227]; therefore, impacts would be less than significant, and lesser than those disclosed in the Precise Plan EIR.

Stormwater Drainage

As discussed above for the project without District Utilities System, the project (with District Utilities System) would pay impact fees to fund stormwater drainage improvements included as part of the CIPs identified in the 2030 General Plan Update Utility Impact Study (GPUUIS). Implementation of these CIPs would ensure adequate storm drain and water service are provided. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[228] The environmental effects associated with constructing these improvements were previously disclosed in the General Plan EIR and Precise Plan EIR. For these reasons, construction of the project with District Utilities System Option would result in less than significant impacts. This is the same impact as disclosed in the Precise Plan EIR.

Electric Power, Natural Gas, and Telecommunications

The project without District Utilities System Option would connect to existing electric power, natural gas, and telecommunications lines, and would be adequately served by them. Because the project with District Utilities System Option would also incorporate thermal energy and microgrid system that would provide independent sources of heating, cooling, and electricity (as described in Section 3.2 Project Description), the project with District Utilities System Option would result in less demand than the project without District Utilities System Option, resulting in a lesser impact than disclosed in the Precise Plan EIR.

[227] Ibid.
[228] Ibid.

For the reasons discussed above, the project 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, the construction or relocation of which could cause significant environmental effects. A site-specific UIS was prepared for the project consistent with Precise Plan EIR MM UTL-1.1, which confirmed the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact UTL-2:	**Both Project Options:** The project (under either option) would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that implementation of the Precise Plan (including the project under either option) would result in an increase in water demand within the City of Mountain View; however, the City's available potable and non-potable water supplies were expected to be sufficient to meet the demands of existing and future uses during normal years through 2035. The Water Supply Assessment completed for the Precise Plan EIR projected shortfalls of 18 percent for single dry years and 20 percent for multiple dry years with implementation of the Precise Plan.[229] The City's UWMP includes a Water Shortage Contingency Plan that can mitigate for shortfalls of up to 50 percent. Therefore, with implementation of the Water Shortage Contingency Plan, adequate water supplies would be available to meet the City's demand including development allowed under the Precise Plan (including the proposed project under either option) in normal, single-dry, and multiple-dry years. This is the same impact as identified in the Precise Plan EIR.[230] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact UTL-3:	**Both Project Options:** The project (under either option) would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR determined that implementation of the Precise Plan would not prevent the RWQCP from meeting wastewater treatment requirements or generate wastewater above the City's allocated treatment capacity.[231] The RWQCP has an overall treatment capacity of 40 mgd and the City of Mountain View is allocated 15.1 mgd of treatment capacity at the RWQCP. Given the City's current wastewater generation (6.88 mgd), the City's remaining available treatment capacity at the RWQCP (2.49 mgd), and the estimate net increase of wastewater generated from implementation of the Precise Plan (753,034 gpd or 0.75 mgd), the Precise Plan EIR concluded impacts would be less than significant. The project (under either option) is consistent with the development assumptions identified for the site

[229] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 265.
[230] Ibid.
[231] Ibid. P. 266.

in the Precise Plan and development of the project (under either option) was accounted for within the Precise Plan EIR. Therefore, the project (under either option) would result in the same impact as identified in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-4:	**Both Project Options:** The project (under either option) would not 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. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that buildout of the Precise Plan would not 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.[232] New developments within the Precise Plan would be required to comply with the California mandated 50 percent waste diversion and CalGreen standards (including a construction waste recycling requirement and readily accessible areas for recycling). Solid waste and recyclables would be transported to the Sunnyvale SMaRT Station for sorting, and commercial compostable are transported to a composting facility in Vernalis. Non-recyclable solid waste generated within the Precise Plan would be collected by Waste Management and disposed of at Kirby Canyon Landfill. The Precise Plan EIR determined the Kirby Canyon Landfill has sufficient capacity to accommodate solid waste generated from the buildout of the Precise Plan, including that of the proposed project (under either option).

The project (under either option) would comply with the same requirements for recycling and solid waste reductions identified in the Precise Plan EIR, and would not adversely affect the City's compliance with the waste diversion requirements and would be served by a landfill with sufficient capacity. This is the same impact as identified in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact UTL-5:	**Both Project Options:** The project (under either option) would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that buildout of the Precise Plan would not adversely affect the City's compliance with the waste diversion requirements under state law because all future developments within the Precise Plan would be required to comply with state and local policies and standards.[233] The project (under either option) would comply with CalGreen standards for construction waste recycling and would divert at least 50 percent of construction waste. Furthermore, solid waste from the project site would be disposed of at the Kirby Canyon Landfill in San José, as discussed under Impact UTL-4. The project (under either option) would not result in a substantial increase in waste landfilled at Kirby Canyon, nor would it be served by a landfill without sufficient capacity. In compliance with the

[232] Ibid.
[233] Ibid.

City Code, General Plan policies, and Precise Plan guidelines, the project (under either option) would not conflict with state and federal solid waste regulations and statutes. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.18.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
UTIL-1	**Both Project Options:** The project (under either option) 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, the construction or relocation of which could cause significant environmental effects.	Yes	S	Precise Plan EIR MM UTIL-1.1	LTS
UTIL-2	**Both Project Options:** The project (under either option) would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Yes	LTS	None	N/A
UTIL-3	**Both Project Options:** The project (under either option) would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Yes	LTS	None	LTS
UTIL	**Both Project Options:** The project (under either option) would not 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.	Yes	LTS	None	N/A
UTIL-5	**Both Project Options:** The project (under either option) would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste.	Yes	LTS	None	N/A

Abbreviation: S – Significant, LTS – Less than Significant.

5.19 WILDFIRE

5.19.1 Environmental Setting

An analysis of wildfire impacts associated with implementation of the Precise Plan was included in the Hazards and Hazardous Materials Section of the Precise Plan EIR. The environmental setting, including the regulatory framework and existing site conditions, for wildfire has not substantially changed since the certification of the Precise Plan EIR.

5.19.1.1 *Existing Conditions*

The project site is not classified as a very high fire hazard severity zone.[234]

5.19.2 Impact Discussion

For the purpose of determining the significance of the project's impact on wildfire, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1) Substantially impair an adopted emergency response plan or emergency evacuation plan?
2) 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?
3) 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?
4) 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?

5.19.2.1 *Project Impacts*

The Precise Plan area (including the project site) is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project (under either option) would not result in wildfire impacts. This is the same impact as disclosed in the Precise Plan EIR.[235] **(Same Impact as Approved Project [No Impact])**

[234] California Department of Forestry and Fire Protection. FHSZ Viewer. Accessed February 15, 2022. https://egis.fire.ca.gov/FHSZ/

[235] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 114.

5.19.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
WLD-1:	**Both Project Options:** The project (under either option) would not result in wildfire impacts.	Yes	NI	None	N/A

Abbreviation: NI – No Impact.

SECTION 6.0 GROWTH-INDUCING IMPACTS

Pursuant to the CEQA Guidelines, a project is considered to be growth inducing if it would "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (Section 15126.2[e]). This section of the EIR is intended to evaluate the impacts of such growth in the surrounding environment. Examples of projects likely to have significant growth inducing impacts include removing obstacles to population growth, for example extending or expanding infrastructure beyond what is needed to serve the project. Other examples of growth inducement include increases in population that may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

The Precise Plan EIR concluded implementation of the Precise Plan (which includes the proposed development) would not significantly induce growth for the following reasons:

- The growth is already planned and accounted for in the City's General Plan, and implementation of the General Plan and Precise Plan would focus growth near transit nodes, which would minimize traffic and associated environmental effects (e.g., air pollution and GHG emissions);
- Although the Precise Plan has the potential to incrementally increase development pressure for additional housing within Mountain View and nearby cities, this additional residential development would be generally located in developed, urban areas, and in accordance with local and regional plans for those cities; and
- The Precise Plan would not result in the expansion of urban services or result in pressure to expand beyond the City's existing boundaries or sphere of influence because it would intensify and diversify uses in a low-density area in an existing, urban setting.[236]

The project (under either option) is implementing the Precise Plan and is consistent with the planned growth and identified strategies and policies of the Precise Plan and General Plan. Additionally, construction of the CUP under the District Systems Option would only meet project-specific demand and would not serve the broader Precise Plan area or expand services to any area outside of the project area. For these reasons, the project would not result in a significant growth inducing impact. Therefore, the project (under either option) would result in the same less than significant growth inducing impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[236] City of Mountain View. *Integrated Final Environmental Impact Report, East Whisman Precise Plan, SCH# 2017082051.* January 2020. Pp. 271 – 272.

SECTION 7.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Pursuant to CEQA Guidelines Section 15126.2(d), an EIR must identify significant irreversible environmental changes that would be caused by the proposed project being analyzed. Significant irreversible changes include the 1) irreversible use of nonrenewable resources, 2) commitment of future generations to similar use, 3) irreversible damage resulting from environmental accidents associated with the project and 4) irretrievable commitments of resources.

7.1 IRREVERSIBLE USE AND IRRETRIEVABLE COMMITMENTS OF NONRENEWABLE RESOURCES

As discussed in the Precise Plan EIR, implementation of Precise Plan (which includes the project under either option), would require the use of nonrenewable resources during construction and operation of development projects. Nonrenewable resources used would include fossil fuels, metals, concrete, plastics, and water. Renewable resources, such as lumber and energy from renewable sources (e.g., solar and wind), would also be used. The City of Mountain View encourages the use of building materials that include recycled materials and requires new development to meet minimum green building design standards. The project (under either option) would be built to current codes, which require insulation and design to minimize wasteful energy consumption. The project would comply with the City's Reach Code requirements for all electric building operations, include rooftop solar panels, and electric vehicle infrastructure, implement a TDM plan designed to reduce residential and nonresidential vehicle trips, meet the intent of LEED Platinum standards on all proposed non-residential buildings, and achieve the equivalent of a GreenPoint rating of 120 points or better for proposed residential buildings. In addition, the site is an infill location currently served by public transportation. Although the district utilities system option would include construction of new utility lines on-site, these utility lines would be designed to maximize the efficiency of energy and water resources on-site and would only deliver energy and wet utilities to the project buildings. Therefore, as concluded in the Precise Plan EIR, the implementation of Precise Plan (which includes the project under either option) would not require the construction of major new lines to deliver energy and would represent a more efficient allocation of nonrenewable resources than other types or patterns of growth.

7.2 COMMITMENT OF FUTURE GENERATIONS TO SIMILAR USES

The project (under either option) would redevelop a site located within an urban area. Development of the project (under either option) would commit resources to prepare the site, construct the buildings, and operate the building, but it would not result in development of undeveloped land.

As concluded in the Precise Plan EIR, implementation of the Precise Plan (which includes the project under either option) would intensify development and increase the diversity of land uses near existing transit stations and would not commit future generations to changes in land use that are substantial.[237]

[237] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 274.

7.3 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS

Without mitigation, irreversible changes to the physical environment could occur from accidental release of hazardous materials associated with development. Compliance with hazardous materials regulations and policies, and remediation of contamination, would reduce impacts to a less than significant level. As discussed in Section 5.8 Hazardous Materials of this EIR, the project (under either option) would not result in significant hazards or hazardous materials impacts.

The Precise Plan EIR concluded that there would be no significant unmitigable hazards and hazardous materials conditions that would substantially affect the public and surrounding environment.[238]

[238] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 274.

SECTION 8.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As discussed in Section 4.1 Air Quality, the project would result in new significant, unavoidable impacts related to operational ROG emissions and health risks (primarily due to construction emissions).

- **Impact AQ-1: Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

SECTION 9.0 ALTERNATIVES

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify the EIR should identify alternatives which "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The purpose of the alternatives discussion is to determine whether there are alternatives of design, scope, or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive (CEQA Guidelines Section 15126.6).

In order to comply with the purposes of CEQA, it is important to identify alternatives that reduce the significant impacts anticipated to occur if the project is implemented and try to meet as many of the project's objectives as possible. The CEQA Guidelines emphasize a commonsense approach – the alternatives should be reasonable, "foster informed decision making and public participation," and focus on alternatives that avoid or substantially lessen the significant impacts. The range of alternatives selected for analysis is governed by the "rule of reason" which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. An EIR is not required to consider alternatives which are infeasible.

The three critical factors to consider in selecting and evaluating alternatives are, therefore: (1) the significant impacts from the proposed project which could be reduced or avoided by an alternative, (2) the project objectives, and (3) the feasibility of the alternatives available. These factors are discussed below.

9.1 FACTORS IN SELECTING AND EVALUATING ALTERNATIVES

9.1.1 Significant Impacts of the Project

As explained above, the CEQA Guidelines state alternatives analysis in an EIR should be limited to alternatives that are feasible and would avoid or substantially lessen any of the significant effects of the project and achieve most of the basic project objectives. In addition to those identified in the Precise Plan EIR, the project would result in a new, significant, unavoidable impacts due to operational ROG emissions and health risks (primarily due to construction emissions):

- **Impact AQ-1: Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

9.1.2 Project Objectives

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of objectives sought by the proposed project. While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the basic objectives is considered relevant to their consideration. As identified in Section 3.4 Project Objectives, the applicant's objectives for the project are as follows:

a) Develop the project area with residential and office uses at an increased density and FAR (consistent with the Character Areas development targets in the Precise Plan) near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit.
b) Redevelop the project site with approximately 1,900 new residential units to better balance the City's jobs-housing ratio.
c) Provide approximately 1.3 million square feet of office uses consistent with the Precise Plan and the following General Plan policies:
    - *LUD 3.1: Land use and transportation*. Focus higher land use intensities and densities within a half-mile of public transit service, and along major commute corridors;
    - *LUD 3.8*: *Preserved land use districts*. Promote and preserve commercial and industrial districts that support a diversified economic base;
    - *LUD 9.2: Compatible transit-oriented development*. Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations; and
    - *LUD 14.3: Business attraction*. Attract innovative and emerging technology businesses.
d) Develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan's Jobs-Housing Linkage Program.
e) Implement a robust TDM plan with trip-reduction measures and on-site amenities that promote walking, bicycling, use of shuttles, transit and other transportation alternatives, consistent with the requirements of the Precise Plan.
f) Support VTA's investment in light rail transit by providing transit-oriented residential and commercial development that facilitates pedestrian and bicycle access to and ridership of transit.
g) Implement sustainable building practices promoting energy and water efficiency consistent with the Precise Plan.
h) Dedicate approximately seven acres of land to the City for the creation of new public parks to serve the existing uses, the proposed project, and the broader community.
i) Support both Precise Plan goals and City Council and staff guidance through the delivery of people-centric community benefits that help people live, work, play, and stay in Mountain View, including measures that support:
    - Housing opportunities and anti-displacement;
    - Retention and growth of small businesses and workforce development;
    - Safe and expanded connections for pedestrians and bicyclists, while consolidating infrastructure for vehicles; and
    - Quality open space for recreation, relaxation and entertainment.

9.1.3 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law interpreting CEQA and the CEQA Guidelines have found that feasibility can be based on a wide range of factors and influences. The CEQA Guidelines state that such factors can include (but are not limited to) the suitability of an alternate site, economic viability, availability of infrastructure, consistency with a general plan or with other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can "reasonably acquire, control, or otherwise have access to the alternative site (Section 15126.6[f][1]).

9.1.4 Alignment with Precise Plan Guiding Principles

To provide additional context, each alternative discussed below is evaluated against the Precise Plan's Guiding Principles,[239] which support and establish the vision for growth in the plan area and are used as a reference point for stakeholders and decision-makers in evaluating projects. These principles include:

1. Transform East Whisman into a mixed-income community with a balance of renters and owners
2. Create a complete neighborhood
3. Focus activity and development around Middlefield Light Rail station
4. Respect North Whisman Area Neighborhood Character
5. Enhance the Middlefield/Whisman Village Center
6. Integrate new housing harmoniously with office uses
7. Maximize land use flexibility while balancing jobs and housing
8. Minimize vehicle trips
9. Build complete streets for active transportation
10. Create a highly-sustainable community

9.2 PROJECT ALTERNATIVES

9.2.1 Project Alternative Considered But Rejected From Further Analysis

9.2.1.1 *Location Alternative*

Pursuant to CEQA Guidelines Section 15126.6(a), an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project. An alternative site may be considered when impacts of the project might be avoided or substantially lessened, and the project proponent can feasibly attain control of the site. Only alternative locations that would avoid or substantially lessen any of the impacts of the project and meet most of the basic project objectives need to be considered for inclusion in the EIR (CEQA Guidelines Sections 15126.6[f] and 15126.6[f][2][A]).

[239] City of Mountain View. East Whisman Precise Plan: Integrated Final Environmental Impact Report. State Clearinghouse Number 2017082051.January 2020. Pp. 17-26.

As described previously, the project proposes to implement a large portion of the City's adopted Precise Plan, which prescribes the land uses to be developed within the Plan. Therefore, decisions regarding the appropriate land use types and densities in this location have recently been made by the City. Because this EIR tiers off the prior certified Precise Plan EIR, the alternatives analysis completed for the Precise Plan, is hereby incorporated by reference.

An alternative location for the project would need to:

- Avoid or substantially lessen the project's significant operational ROG emissions and health risks (primarily due to construction emissions) impacts;
- Be of similar size as the project site (approximately 40-acres) and be able to accommodate the project's buildout, density, and mix of uses;
- Served by available infrastructure (including transportation and utilities);
- Have the appropriate General Plan designation that would allow for high intensity commercial office, residential, retail, and community uses at an intensity over 1.0 FAR; and
- Be, or able to be, under control of the applicant.

In consideration of an alternative location in an EIR, the CEQA Guidelines advise the key question is "whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."[240] Any project of similar size and intensity as the proposed project (under either option) within the City of Mountain View would have similar construction and operational air quality impacts. An alternate location that meets most of the above listed characteristics is the approximately 40-acre San Antonio Shopping Center located at the southwest corner of California Street and Showers Drive (2550 West El Camino Real/350 Showers Drive); however, it is currently developed and not under the control of the applicant. Additionally, if the applicant were to gain control over this site (which has sensitive receptors approximately 85 feet east of the site and future residential units under construction 140 feet northwest of the site at 2580 California Street), development of the project (under either option) on this alternative site would result in similar construction health risk impacts to those receptors as the project would have sensitive receptors of similar proximity to the project site. No other alternative locations in the City would meet the above listed criteria, nor are any isolated from sensitive receptors. Therefore, an alternative infill location in Mountain View would not substantially lessen the project's identified significant and unavoidable impacts.

Case law interpreting CEQA Guidelines Section 15126.6(a), supports the conclusion that an EIR need not include a potentially feasible alternative location in every instance, based on the rule of reason and considerations of feasibility.[241] For the reasons described above, an alternative site was not considered further.

[240] CEQA Guidelines Section 15126.6(f)(2)(A)
[241] California Native Plant Society v City of Santa Cruz (2009) and Mira Mar Mobile Community v City of Oceanside (2004)

9.2.1.2 *Alternative Site Design, Smaller Project Site Alternative*

As discussed in Section 4.1 Air Quality, the project site is adjacent to an approved residential project at 400 Logue Avenue and project construction activities would expose those future residents to TAC emissions in excess of BAAQMD health risk thresholds. Health risk impacts are due, in part, to the proximity of sensitive receptors to construction activities. Therefore, an alternative site design and smaller project site alternative were considered in order to avoid the project's significant, unavoidable health risk impact.

Generally, project construction activities would result in less than significant health risks to sensitive receptors located 1,000 feet or greater from construction activities. However, as shown in Figure 9.2-1 below, most of the project site is located within a 1,000-foot radius of 400 Logue Avenue. No rearrangement of land uses or developing the project on a smaller portion of the project site located 1,000 feet from the 400 Logue site is feasible. For this reason, an alternative site design or smaller project site alternative were not considered further.

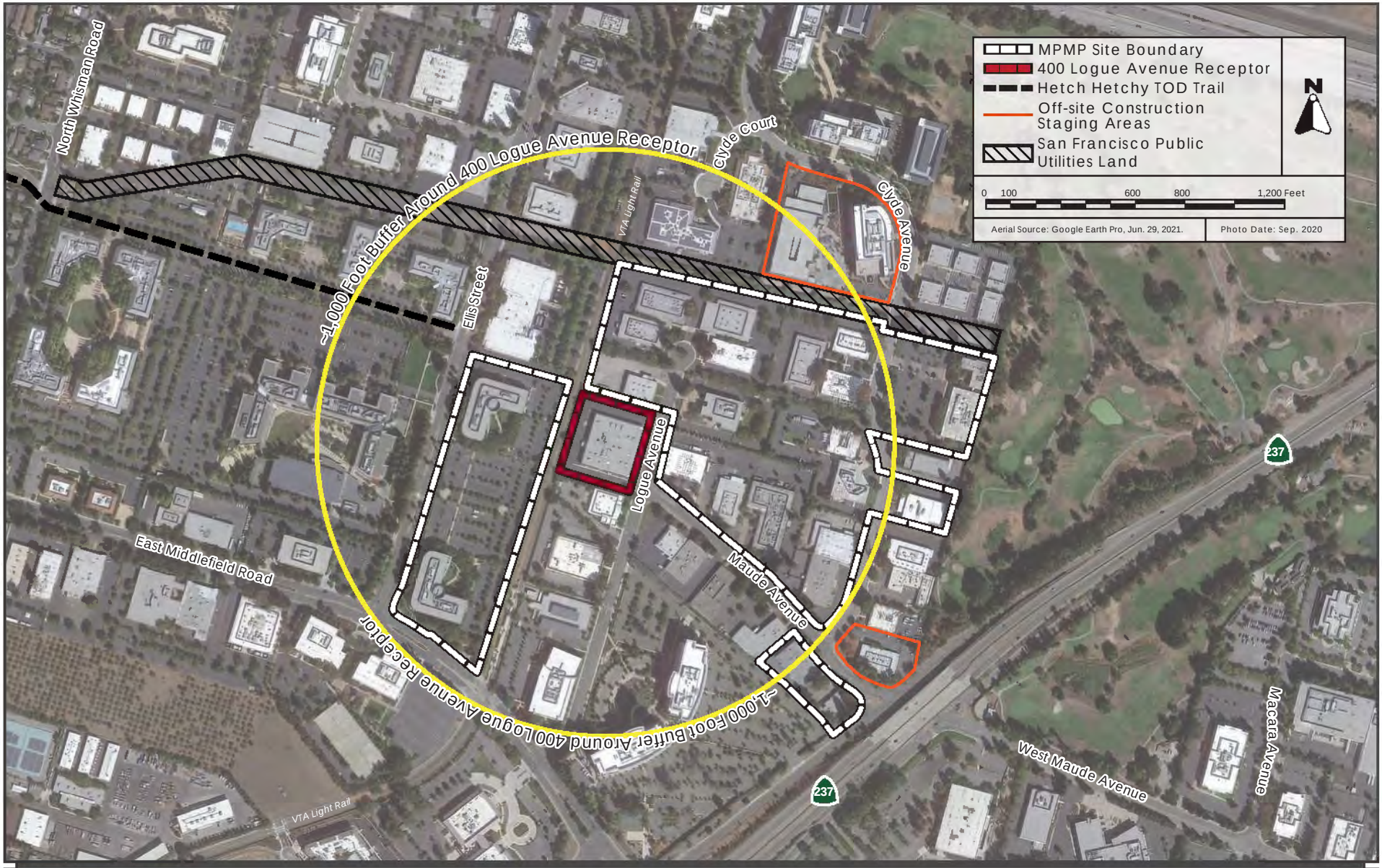
9.2.2 Selected Alternatives

The selected alternatives for analysis are the No Project Alternatives, Reduced Development Alternatives, and Rescheduled Construction Alternative. A breakdown of the development assumptions for each of the selected alternatives is provided in Table 9.2-1 below. A summary comparison of the mitigated environmental impacts of the project (under either option) and the project alternatives is provided in Table 9.2-2 at the end of this section.

9.2.2.1 *No Project, No New Development Alternative*

The CEQA Guidelines specifically require consideration of a "No Project" Alternative. The purpose of including a No Project Alternative is to allow decision makers to compare the impacts of approving the project versus the impacts of not approving the project. The CEQA Guidelines specifically advise the No Project Alternative shall address both the existing conditions and "what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (Section 15126.6(e)(2).18. Under the No Project Alternative, therefore, the project site could remain as it is today or the site could be redeveloped with uses consistent with the existing Precise Plan and General Plan land use designation. For this reason, there are two logical No Project alternatives: 1) a No Project, No New Development Alternative (which is described below) and 2) a No Project, Redevelopment Alternative (which is described under Section 9.2.2.2 below).

Under the No Project, No New Development Alternative, the project site would remain as it is today. Under existing conditions, the site is developed with a total of 684,645 square feet of office, R&D, and light industrial uses.



REARRANGED PROJECT ALTERNATIVE | FIGURE 9.2-1

Table 9.2-1: Summary of Alternatives Development Assumptions						
Land Use	**Project (under either option)[1]**	**Project Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Light Industrial Square Footage	0	684,645	0	0	0	0
Office Square Footage	1,317,000	0	691,285	1,066,770	908,730	1,317,000
Residential Dwelling Units	1,900	0	0	1,539	1,311	1,900
Retail Square Feet	30,000	0	5,000	24,300	20,700	30,000
Community/ Civic Square Footage	20,000	0	0	16,200	13,800	20,000
Park land acres	10.15	0	0	7.8	6.6	10.15
[1] The project with District Utilities System Option includes a CUP not reflected as a land use in the table.						

Comparison of Environmental Impacts

The No Project, No New Development Alternative would avoid the project's significant, unavoidable air quality impacts related to operational ROG emissions and health risks (primarily due to construction emissions), as well as avoid all other impacts disclosed in Section 5.0 Previously Identified Effects because it would not change existing conditions (see Table 9.2-2).

Relationship to Project Objectives

The No Project, No New Development Alternative would not meet any of the project objectives because it would not redevelop the site with a high-density mix of uses (including residential) at a density consistent with the Precise Plan (objectives a through d, f, and h) or implement sustainable building practices (objective g). Additionally, because the No Project, No New Development Alternative would not involve a change in the square footage of development on-site, it would not be required under the Precise Plan to implement a TDM program and would, therefore, not meet objective e nor would it provide community benefit, housing, multi-modal connections, and open space identified in objectives h and i.

Consistency with Precise Plan Principles

This alternative would not meet any of the Precise Plan's guiding principles because it would not redevelop the site consistent with the Precise Plan.

Conclusion

The No Project, No New Development Alternative would avoid the project's impacts (under either option) but would not meet any of the project objectives. This alternative would not meet any of the Precise Plan's guiding principles because it would not redevelop the site consistent with the Precise Plan.

9.2.2.2 *No Project, Redevelopment Alternative*

Given the site's land use designation, it is reasonable to assume that if the proposed project were not approved, an office development could be developed on the project site at the base FAR allowed with a minimum amount of retail. The proposed project (under either option) is consistent with and allowed by the City's General Plan and Precise Plan. The site is identified for high-density, mixed-use development. This policy decision was made when the City's General Plan and Precise Plan were adopted; a specific development proposal need not trigger ad hoc reconsideration of this policy.[242]

Nonetheless, for purposes of this EIR, an alternative redevelopment of the site is considered that would meet the base FAR allowed on the site, which is 0.4 FAR for non-residential uses across the Precise Plan Mixed Use and Employment Area North Character Areas, and include the minimum amount of retail uses required without triggering the City's housing requirements. Assuming the whole site (40 acres) is developed with non-residential uses, the No Project, Redevelopment Alternative would redevelop the site with up to 696,285 square feet (0.4 FAR) of non-residential uses, including a minimum 5,000 square feet of retail required by the Precise Plan. It is also assumed this Alternative

[242] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 C3d 553.

would implement sustainable building practices and a TDM program consistent with the requirements of the Precise Plan.

Comparison of Environmental Impacts

Given the scale of development under this alternative, it is assumed that construction air quality emissions and health risks impacts would be less than the project (under either option) because the amount of development is reduced, providing only a small increase from existing square footage but the proximity to sensitive receptors is the same. As discussed in Section 4.0, the project's significant operational ROG emissions are primarily attributed to architectural coatings, which is directly related to the amount of building surface area. For this reason, a reduction in building surface area requiring architectural coatings would result in a proportional reduction in ROG emissions. Based on the reduced size of development under this alternative, it is assumed that operational ROG emissions would be less than significant. This alternative would require a project-specific VMT analysis because it does not meet the City's density screening criteria of 0.75 FAR for projects located near transit. Therefore, this alternative could result in a significant VMT impact requiring mitigation.

Other impacts identified in Section 5.0 Previously Identified Effect for this alternative, would be similar to the proposed project due to its consistency with the development evaluated in the Precise Plan EIR and existing site conditions, but would not include housing or as much office square footage as proposed by the project (under either option). This alternative would provide approximately 0.5 percent of the planned office square footage in the Precise Plan.[243] Additionally, because this alternative does not include Bonus FAR (i.e., this alternative is less dense), the required sustainable building practices that would apply to this alternative would be less than those required of the proposed project. For example, this alternative would be required to meet LEED Gold standards whereas the project (with about twice as much office development) is required to meet LEED Platinum standards.[244]

Relationship to Project Objectives

The No Project, Redevelopment Alternative partially meets objectives a, c, and f because it does not include residential uses and proposes a little over half of the desired office square footage. The alternative would not meet objective b because it does not include housing and, thus, does not require park land. Objectives d and i, pertaining to the City's Jobs-Housing Program and community benefits, are not applicable because the project would not be subject to the program or be required to provide community benefits.

The No Project, Redevelopment Alternative would implement sustainable building practices and a TDM program consistent with Precise Plan requirements and, therefore, meet objectives e and g. Additionally, while the Redevelopment Alternative does not include transit-oriented residential development (as identified in objective f), it could deliver safe and expanded pedestrian and bicycle connections in accordance with the Precise Plan (refer to objectives f). The Redevelopment Alternative

[243] Calculated as a percent of net new office square footage assumed in Precise Plan EIR (2.3 million square feet of office planned in Precise Plan EIR). Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Page 11

[244] United States Green Building Council. "How LEED Works." https://www.usgbc.org/leed Accessed March 23, 2022.

would not include park land dedication, Bonus FAR, community benefits or housing, therefore, objectives h and i would not be met.

Consistency with Precise Plan Principles

The No Project Redevelopment Alternative could align with some portions of the Precise Plan's guiding principles 8, 9, and 10, by incorporating a TDM program for trip reductions and providing active transportation improvements (e.g., bike lanes, sidewalks) and green building design as required per the Precise Plan. This alternative can partially align with principle 3, as it provides some increased development near transit, but not at the highest intensities. However, this alternative would not align with principles 1, 2, 6, and 7 as it does not establish a mix of new land uses (residential, retail and open space) and balancing jobs and housing opportunities with greater intensity near transit. Guiding principles 4 and 5 are not applicable based on the project location.

Conclusion

As discussed above, the No Project Redevelopment Alternative would result in less or similar impacts as the proposed project. In regards to the project objectives, the No Project Redevelopment Alternative would:

- Meet objectives e and g
- Partially meet objectives a, b, c, and f
- Not meet objective h and i

In regards to the Precise Plan guiding principles, this alternative would:

- Align with principles 8, 9, and 10
- Partially align with principle 3
- Not align with principles 1, 2, 6, and 7.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.3 *Mitigated 19% Reduced Development Alternative*

The purpose of the Mitigated 19% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts with the incorporation of the air quality mitigation measures identified for the project (under either option). To reduce the project's ROG emissions during operations, the overall development would have to be reduced by approximately 19 percent to achieve less than significant impacts with mitigation incorporated. This alternative, therefore, assumes approximately 1,066,770 square feet of office uses, 1,539 residential units, 24,300 square feet of retail uses, 16,200 square feet of community/civic uses, and 7.8 acres of park land. This alternative would have a total FAR of approximately 1.29.

Comparison of Environmental Impacts

As discussed in Section 4.0, the project's significant operational ROG emissions are primarily attributed to architectural coatings, which is directly related to the amount of building surface area. For this reason, a reduction in building surface area requiring architectural coatings would result in a proportional reduction in ROG emissions. The project's operational ROG emissions with mitigation are approximately 19 percent above the significance threshold. Therefore, reducing the project's

building surface area by 19 percent would reduce the project's operational ROG emissions by 19 percent. For the purposes of this analysis, a reduction in building surface area equates to an equal reduction in the amount of development. For these reasons, the Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG impact with incorporation of the same mitigation measures identified for the project (under either option). This alternative would meet the City's density screening criteria of 0.75 FAR for projects located near transit. Therefore, as with the proposed project, this alternative would have a less than significant VMT impact under the City's current VMT policy.[245] All other impacts would be the same or similar to the proposed project because the Mitigated 19% Reduced Development Alternative would be consistent with the development evaluated in the Precise Plan EIR and subject to the same existing site conditions as the project.

Relationship to Project Objectives

This alternative would develop the site with residential and office uses at an increased density and FAR consistent with the Character Areas and would therefore, meet objective a. The Mitigated 19% Reduced Development Alternative would provide 19 percent less office square footage and residential dwelling units than identified in objectives b (1,900 dwelling units) and c (1.3 million square feet), therefore, it would partially meet these objectives. The Mitigated 19% Reduced Development Alternative would develop residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan, therefore, it would meet objectives d and e. Because this alternative would develop transit-oriented residential and office uses and could include on-site amenities to promote multi-modal transportation options, it would meet objective f. The Mitigated 19% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan, thus it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate 7.8 acres of land to the city for development of future parks pursuant to the City's Park Land Dedication Ordinance. Therefore, the Mitigated 19% Reduced Development Alternative would meet objective h. Additionally, because this alternative would develop a mix of uses on-site, it could include community benefits such as those identified in objective i, although to a lesser extent than the project.

Consistency with Precise Plan Principles

This alternative aligns with Precise Plan principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. However, the alternative's alignment with guiding principle 7 would be substantially lessened by reduced development. In particular, the Precise Plan's Jobs-Housing Linkage program establishes a minimum requirement of housing units to new office development, such that a 19 percent reduction in office square footage would directly impact the number of residential units delivered by a factor of three units per 1,000 square feet of net new office. For this alternative, the project applicant would be minimally required to construct 1,146 residential units (754 units or 40 percent fewer than the proposed project). Guiding principles 4 and 5 are not applicable based on the project location.

[245] This alternative would also contribute to the significant unavoidable VMT impact identified in the Precise Plan EIR for development allowed under the Precise Plan prior to adoption of the City's VMT policy.

It should be noted that the City is currently preparing its required Housing Element update and is allocating and projecting the future development of residential units on the project site.

Conclusion

As discussed above, the Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions with the implementation of the same mitigation measures as identified for the project (under either option) and lessen the project's mitigable construction criteria pollutant emissions and health risk impacts with implementation of the same mitigation measures identified for the project (under either option). All other impacts disclosed would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 19% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i; and
- Partially meet objective b and c.

In regards to the Precise Plan guiding principles, this alternative would:

- Align with principles 1, 2, 3, 6, 7, 8, 9, and 10, but alignment with principle 7 would create a significant reduction in residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.4 *31% Reduced Development Alternative*

The purpose of the 31% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts without requiring mitigation. To reduce the project's ROG emissions during operations to the extent that mitigation is not required, the overall development would have to be reduced by approximately 31 percent. This alternative, therefore, assumes approximately 908,730 square feet of office uses, 1,311 residential units, 20,700 square feet of ground floor retail space, 13,800 square feet of community/civic uses, and 6.6 acres of park land. This alternative would have a total FAR of approximately 1.10.

Comparison of Environmental Impacts

The 31% Reduced Development Alternative would reduce the project's significant, unavoidable operational ROG impact to a less than significant level with no mitigation measures required. All other impacts would be similar as described for the Mitigated 19% Reduced Development Alternative above, though construction and operational criteria pollutant emissions, and health risks would be lesser than disclosed for the Mitigated 19% Reduced Development Alternative because this alternative assumes less development on-site.

Relationship to Project Objectives

The 31% Reduced Development Alternative would develop residential and office uses at an increased density and FAR consistent with the Character Areas and would therefore meet objective a. The 31% Reduced Development Alternative would provide 31 percent less office square footage and less residential dwelling units than identified in objectives b (1.3 million square feet), and c (1,900 dwelling units), therefore, it would only partially meet these objectives. The 31% Reduced Development Alternative would develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan, therefore, it would meet objectives d and e. Because this alternative

would develop the same mix of uses on-site as the proposed project (under either option), it would support light rail transit and meet objective f. The 31% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan, thus it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate land to the City for development of future parks at a similar rate as the proposed project (under either option). Therefore, the 31% Reduced Development Alternative would dedicate 6.6 acres of parkland and meet objective h (which calls for up to seven acres of parkland). Additionally, because this alternative would develop the same mix of uses on-site as the proposed project (under either option), it could include community benefits such as those identified in objective i, although to a lesser extent than the project.

Consistency with Precise Plan Principles

This alternative would have the same alignment with the Precise Plan principles as the Mitigated 19% Alternative but would result in an even greater reduction in housing units in relation to guiding principle 7 and the Jobs-Housing Linkage Program as outlined above for the Mitigated 19% Alternative. For this alternative, the project applicant would be minimally required to construct 672 residential units (1,228 units or 65 percent fewer than the proposed project). Guiding principles 4 and 5 are not applicable based on the project location.

It should be noted that the City is currently preparing its required Housing Element update and is allocating and projecting the future development of residential units on the project site.

Conclusion

As discussed above, the 31% Reduced Development Alternative would avoid the project's significant, unavoidable construction (with mitigation required) and lessen the project's mitigable construction criteria pollutant emissions and significant and unavoidable health risk impacts with the incorporation of the same mitigation measures identified for the project (under either option). All other impacts disclosed would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 31% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i
- Partially meet objectives b and c

In regards to the Precise Plan guiding principles, this alternative would be:

- Alignment with principles 1, 2, 3, 6, 7, 8, 9, and 10, but alignment with principle 7 would create a significant reduction in residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.5 *Rescheduled Construction Alternative*

The project would result in significant, unavoidable construction health risk impacts at the approved 400 Logue Avenue residential project due to the location of Phase II construction activities (under either option) adjacent to these future receptors. The purpose of this alternative is to avoid the project's significant, unavoidable health risk impact. According to the Initial Study of Environmental Significance prepared for the approved 400 Logue Residential project, it would be constructed and operational in 2025. Rescheduling Phase II construction activities to occur first would ensure pollutants

associated with health risks from the project (under either option) are emitted before the approved 400 Logue Residential project is occupied, reducing the project's health risk impacts on residents at 400 Logue Avenue. Under this alternative, Phase II construction would begin in November 2022 and extend until approximately October 2026, with the heavy construction activities (demolition, site preparation, grading, excavation, and trenching) being completed by approximately July 2024.

Comparison of Environmental Impacts

The Rescheduled Construction Alternative would likely reduce the project's significant, unavoidable health risk impacts to a less than significant level with implementation of the same mitigation measures as identified for the proposed project because the project's largest health risks would occur prior to occupation of the 400 Logue Avenue project. All other impacts would be the same as the proposed project with all identified mitigation measures and conditions of approval because this alternative would include the same development on the same site.

Relationship to Project Objectives

The Rescheduled Construction Alternative would meet all of the project objectives to the same extent as the project (under either option), except objective d as the residential units would not be delivered prior to the office development. Implementing the Rescheduled Construction Alternative, per the Precise Plan, would result in constructing office buildings that cannot be occupied until the residential units have been constructed per Precise Plan requirements for the Jobs-Housing Linkage Program.

Consistency with Precise Plan Principles

This alternative aligns with the Precise Plan principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. In the alternative's aligning with guiding principle 7, it would impact the development since the Precise Plan requires new office built under the Job-Housing Linkage program to obtain occupancy only once the associated residential development obtains occupancy. This would result in the office buildings remaining vacant for multiple years, which is not a typical development or business practice. Additionally, the applicant has indicated advancing the office development in the project first would be logistically and physically challenging as the Phase II development sites are used for construction staging of Phase I development, which is immediately adjacent; there are no alternative sites immediately adjacent to Phase I to locate construction staging. Guiding principles 4 and 5 are not applicable based on the project location.

Conclusion

The Rescheduled Construction Alternative would avoid the project's significant, unavoidable health risk impacts. All other impacts would be the same as the proposed project. The alternative would meet all of the project objectives to the same extent as the proposed project, except for objective d. This would result in a period of time when office buildings on the site would remain vacant while residential units are constructed, based on Precise Plan requirements. This alternative would align with Precise Plan principles 1, 2, 3, 6, 7, 8, 9, and 10, but aligning with principles 7 would create a challenging pattern of development with vacant office buildings. Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.6 *Environmentally Superior Alternative*

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the discussion of project alternatives, the environmentally superior alternative to the project is the No Project, No New Development Alternative because it would avoid all of the project's significant environmental impacts. CEQA Guidelines Section 15126.6 (e)(2) states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Therefore, in addition to the No Project alternatives, the Mitigated 19% Reduced Development Alternative, 31% Reduced Development Alternative, and Rescheduled Construction Alternative would be environmentally superior alternatives because they would each avoid one of the project's significant, unavoidable impacts (operational ROG emissions and/or health risks primarily from construction operations). Of these three alternatives, the 31% Reduced Development is the most environmentally superior because it avoids one of the project's significant and unavoidable air quality impacts and would have the least amount of development (which would result in less energy use, noise generation, and utility demand) compared to the Mitigated 19% Reduced Development Alternative and Rescheduled Construction Alternative.

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Aesthetics	LTS	**NI**	LTS	LTS	LTS	LTS
Agricultural and Forestry Resources	NI	NI	NI	NI	NI	NI
Air Quality						
• Operational Criteria Air Pollutant Emissions	SU	**NI**	**LTS**	**LTSMM**	**LTS**	SU
• Health Risk	SU	**NI**	**SU**	**SU**	**SU**	**LTSMM**
• Odor	LTS/LTSMM*	**NI**	LTS/LTSMM*	LTS/LTSMM*	LTS/LTSMM*	LTS/LTSMM*
Biological Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Cultural Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Energy	LTS	**NI**	**LTS**	**LTS**	**LTS**	LTS
Geology and Soils	LTS	**NI**	LTS	LTS	LTS	LTS
Greenhouse Gas Emissions	LTS	**NI**	LTS	LTS	LTS	LTS
Hazards and Hazardous Materials	LTSMM	**NI**	LTSMM	LTSMM	LTSMM	LTSMM
Hydrology and Water Quality	LTS	**NI**	LTS	LTS	LTS	LTS

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Land Use	LTS	**NI**	LTS	LTS	LTS	LTS
Mineral Resources	NI	NI	NI	NI	NI	NI
Noise	LTSMM	**NI**	**LTSMM**	**LTSMM**	**LTSMM**	LTSMM
Population and Housing	LTS	**NI**	LTS	LTS	LTS	LTS
Public Services	LTS	**NI**	LTS	LTS	LTS	LTS
Recreation	LTS	**NI**	LTS	LTS	LTS	LTS
Transportation	LTS	**NI**	LTSMM**	LTS	LTS	LTS
Tribal Cultural Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Utilities and Service Systems	LTSMM	**NI**	**LTSMM**	**LTSMM**	**LTSMM**	LTSMM
Wildfire	NI	NI	NI	NI	NI	NI
Meets Project's Objectives?						
Objective a	Yes	No	Partially	Yes	Yes	Yes
Objective b	Yes	No	No	Partially	Partially	Yes
Objective c	Yes	No	Partially	Partially	Partially	Yes
Objective d	Yes	No	N/A	Yes	Yes	Yes
Objective e	Yes	No	Yes	Yes	Yes	Yes
Objective f	Yes	No	Partially	Yes	Yes	Yes

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Objective g	Yes	No	Yes	Yes	Yes	Yes
Objective h	Yes	No	No	Yes	Yes	Yes
Objective i	Yes	No	No	Yes	Yes	Yes

Notes: **Bolded** text indicates impacts that would be less than the proposed project.
*The project without District Utilities System Option would have less than significant odor impacts, the project with District Utilities System Option would have less than significant odor impacts with incorporation of mitigation measures.
** Assumes mitigation may be required to reduce VMT impacts from No Project Redevelopment Alternative.
NI = No Impact, LTS = Less than Significant Impact, LTSMM = Less than Significant Impact with Mitigation Measures Incorporated, SU = Significant and Unavoidable Impact.

SECTION 10.0 REFERENCES

The analysis in this EIR is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 11.0 LEAD AGENCY AND CONSULTANTS

11.1 LEAD AGENCY

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SECTION 12.0 ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-containing materials
AFY	Acre feet per year
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
bgs	Below Ground Surface
BMP	Best Management Practice
2017 CAP	2017 Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	Capital Improvement Projects
CLUP	Comprehensive Land Use Plan
CNEL	Community Equivalent Noise Level
CRHR	California Register of Historical Resources
dB	Decibel
dBA	A-weighted Decibel
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESL	Environmental Screening Level
EWPP	East Whisman Precise Plan
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps

GHG	Greenhouse Gas
General Plan	City of Mountain View 2030 General Plan
Gpd	Gallon per day
Gpm	Gallons per minute
GPUUIS	2030 General Plan Update Utility Impact Study
Leq	Noise Equivalent Level
LID	Low Impact Development
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MG	Million gallons
MGD	Million Gallons per Day
mpg	Miles per Gallon
MPMP	Middlefield Park Master Plan
MRP	Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit
NAHC	California Native American Heritage Commission
NOD	Notice of Determination
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PGE	Pacific Gas & Electric
Precise Plan EIR	East Whisman Precise Plan EIR
PM	Particulate Matter
RWQCB	Regional Water Quality Control Board
RWQCP	Palo Alto Regional Water Quality Control Plant
SB	Senate Bill
SFPUC	San Francisco Public Utilities Commission
SR	State Route
SVCE	Silicon Valley Clean Energy
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants

TCR	Tribal Cultural Resources
TOD	Transit Oriented Development
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
Valley Water	Santa Clara Valley Water District
VMT	Vehicle Miles Traveled
VTA	Valley Transportation Authority