

CITY OF MOUNTAIN VIEW
RESOLUTION NO.
SERIES 2023

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW
CERTIFYING THE 2023-2031 HOUSING ELEMENT UPDATE ENVIRONMENTAL IMPACT REPORT
AND ADOPTING FINDINGS RELATED TO ENVIRONMENTAL IMPACTS, MITIGATION MEASURES,
AND ALTERNATIVES AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS AND A
MITIGATION MONITORING AND REPORTING PROGRAM IN COMPLIANCE WITH THE
CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000, *et seq.*, the City of Mountain View (“City”) has prepared an Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update, including General Plan, Zoning, and Precise Plan amendments necessary for the Housing Element sites inventory (hereinafter “Project”); and

WHEREAS, the City prepared and circulated a Draft EIR for the requisite 45-day public comment period, which ended on September 6, 2022, and gave all public notices in the manner and at the times required by law; and

WHEREAS, the City prepared responses to comments received on the Draft EIR as reflected in the Response to Comments/Final EIR document dated November 2022, which address all written and verbal comments on the environmental issues raised during the public review and comment period for the Draft EIR, and was made available to all commenters and the public on November 4, 2022; and

WHEREAS, the Response to Comments/Final EIR document dated November 2022, together with the Draft EIR, comprise the Final EIR; and

WHEREAS, the Final EIR identifies certain significant effects on the environment that would result from the implementation of the proposed Project; and

WHEREAS, the Final EIR identifies mitigation measures which, when implemented, will substantially lessen or avoid the significant effects on the environment caused by the proposed Project, with the exception of the significant unavoidable impacts related to generation of a cumulatively considerable net increase in emissions of reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter in a region that is considered nonattainment under an applicable Federal or State ambient air quality standard; and

WHEREAS, the Final EIR identifies and analyzes a reasonable range of alternatives to the proposed Project; and

WHEREAS, the Mitigation Monitoring and Reporting Program has been prepared pursuant to CEQA to monitor the Project and to mitigate or avoid significant effects on the environment; and

WHEREAS, the Environmental Planning Commission held a public hearing on December 7, 2022 on said Project and recommended that the City Council certify the EIR, adopt findings as set forth in this Resolution in accordance with CEQA, and approve the General Plan, Zoning, and Precise Plan amendments necessary for the Housing Element sites inventory subject to the required findings; and

WHEREAS, the City Council held a public hearing on January 24, 2023 on the Final EIR and the Project, and received and considered all evidence presented at said hearing, including all associated staff reports, meeting minutes, testimony, and evidence constituting the record of proceedings (as defined in the CEQA Findings) and the recommendation for approval from the Environmental Planning Commission; now, therefore, be it

RESOLVED: that the City Council of the City of Mountain View, having independently considered the Final EIR and the potentially significant environmental effects of the Project as shown in the Final EIR:

1. Certifies that the Final EIR, attached hereto as Exhibit A, has been completed in compliance with CEQA, reflects the independent judgment and analysis of the City, and has been presented to the City Council, which reviewed and considered the information in it, along with other relevant information in the Record of Proceedings, including, without limitation, public testimony, written correspondence, and staff reports and responses, before approving the Project.

2. Adopts the CEQA findings for the Project, attached hereto as Exhibit B.

3. Adopts the Mitigation Monitoring and Reporting Program for the Project, attached hereto as Exhibit C.

4. Adopts all of the feasible mitigation measures identified and described in the Final EIR and determines that the Project, as mitigated, will avoid or reduce all of the significant adverse impacts to a less-than-significant level, with the exception of the significant unavoidable impacts related to generation of a cumulatively considerable net increase in emissions of reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter in a region that is considered nonattainment under an applicable Federal or State ambient air quality standard.

5. Finds that a reasonable range of potentially feasible alternatives were identified and evaluated in the Final EIR and further finds that none of the alternatives identified and evaluated in the Final EIR will achieve the Project objectives to the same degree as the proposed Project

and do not represent substantial environmental benefits over the proposed Project and are, therefore, rejected as infeasible, within the meaning of CEQA, in favor of the proposed Project.

EY/1/RESO
810-12-07-22r-3

- Exhibits:
- A. Final EIR
 - B. CEQA Findings
 - C. Mitigation Monitoring and Reporting Program

CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE

Response to Comments / Final Environmental Impact Report
SCH# 2022020129

Prepared by

November 2022



In conjunction with



CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE

Response to Comments / Final Environmental Impact Report
SCH# 2022020129

Prepared by

November 2022



In conjunction with



787 The Alameda
Suite 250
San Jose, CA 95126
408.660.4000
esassoc.com



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TABLE OF CONTENTS

City of Mountain View Housing Element Update, Response to Comments/Final Environmental Impact Report

	<u>Page</u>
Chapter 1, Introduction	1-1
1.0 CEQA Process.....	1-1
1.1 Intended Use of the Final EIR.....	1-2
1.2 Mitigation Monitoring and Reporting Program	1-3
1.3 New Information in the Final EIR	1-3
1.4 Organization of This Final EIR.....	1-4
Chapter 2, Updated Project Information	2-1
2.0 Introduction	2-1
2.1 Updates Related to the Project.....	2-1
Chapter 3, Comments and Responses	3-1
3.1 Introduction	3-1
3.2 List of Commenters.....	3-1
3.3 Responses to Individual Comment Letters	3-3
3.4 Responses to Public Hearing Comments	3-61
Chapter 4, Errata to the Draft EIR	4-1
4.0 Introduction	4-1
4.1 Text Changes to the Draft EIR.....	4-1
4.2 Implication of Changes to the Draft EIR.....	4-1
4.3 Changes to Chapter 3: Project Description.....	4-2
4.4 Changes to Section 4.4: Cultural and Tribal Cultural Resources	4-8
4.5 Changes to Section 4.8: Hazards and Hazardous Materials	4-9
4.6 Changes to Section 4.13: Public Services and Recreation.....	4-10
4.7 Changes to Section 4.14: Transportation	4-12
 Appendices	
A. Mitigation Monitoring and Reporting Program.....	A-1
 List of Figures	
3-3 Housing Site Locations Overview	4-4
 List of Tables	
3-1 Comment Letters Received Concerning the Draft EIR	3-2
3-2 Environmental Planning Commission Public Speakers and Commissioners	3-2

CHAPTER 1

Introduction

This Final Environmental Impact Report (EIR) has been prepared by the City of Mountain View (“City”) (Lead Agency) pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to present the environmental analysis of the proposed City of Mountain View Housing Element Update Project (“HEU” or “Project”) to the public for review and for agency decision-makers to use in their consideration of the HEU.¹ This chapter summarizes the CEQA process for the HEU, explains the CEQA context for this Final EIR and new information provided herein, and describes the organization of this document.

1.0 CEQA Process

1.0.1 Notice of Preparation

Pursuant to the requirements of CEQA for the initiation of environmental review, on February 4, 2022, the City sent a Notice of Preparation (NOP) to the State Clearinghouse, responsible and trustee government agencies, organizations, and individuals potentially interested in the Project. The NOP requested that agencies with regulatory authority over any aspect of the Project describe that authority and identify relevant environmental issues that should be addressed in the EIR. Interested members of the public were also invited to comment. The comment period for the NOP extended from February 4, 2022 to March 7, 2022, during which time, the City accepted written comments on the scope of the EIR.² A scoping meeting was held by the City on February 24, 2022 to accept oral comments. Oral and written comments received during the comment period addressed a range of topics including biological resources, cultural resources and tribal cultural resources, hazards and hazardous materials, land use and planning, population and housing, public services and recreation, and transportation.

1.0.2 Notice and Public Review of the Draft EIR

The City issued a Notice of Availability (NOA) of the Draft EIR on July 22, 2022, announcing the availability of the Draft EIR for public review and comment. The NOA noticed a 45-day public review and comment period on the Draft EIR, starting Friday July 22, 2022, ending on Monday September 5, 2022.³ During the public review and comment period on the Draft EIR, a

¹ The *California Environmental Quality Act* can be found in the California Public Resources Code, Section 21000 et seq. The State CEQA Guidelines, formally known as the *Guidelines for California Environmental Quality Act*, can be found in the California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.

² Late comments were also accepted and received through March 14, 2022.

³ Due to the Labor Day holiday on September 5, 2022, comments were accepted through September 6, 2022.

public hearing at the City of Mountain View Environmental Planning Commission (EPC) was held on Wednesday, August 3, 2022.

The City encouraged agencies and interested parties to submit written comments on the Draft EIR to the City Community Development Department by email or U.S. mail. By the end of the comment period, the City received 7 comment letters. A list of the commenters is provided in Chapter 3, Section 3.2, *List of Commenters*, of this Final EIR.

1.0.3 Response to Comments / Final EIR

The City has prepared written responses to comments received during the public review and comment period for the Draft EIR. These comments and the “Response to Comments” are provided in Chapter 3 of this Final EIR. Chapter 3 provides all written comments (submitted by email) together with oral comments received at the hearing conducted by the EPC.

In addition to providing the comments and responses to comments on the Draft EIR, this document includes necessary updates and other modifications and clarifications to the text and exhibits in the Draft EIR in Chapter 4, *Errata to the Draft EIR*. The Draft EIR, together with the comments, responses to comments, and other information included in this Response to Comments document constitutes the Final EIR, consistent with State CEQA Guidelines Section 15132, *Contents of Final Environmental Impact Report*. Due to the large volume of text contained in the Draft EIR and its appendices, this Response to Comments/ Final EIR does not contain the full text of the Draft EIR, which remains available in a separate volume and is included here by reference.

The Draft EIR, this Response to Comments / Final EIR, and all supporting technical documents can be found on the Project website at: <https://www.mvhousingelement.org/> and on the State Clearinghouse Website at: <https://ceqanet.opr.ca.gov/Project/2022020129>.

1.1 Intended Use of the Final EIR

The City of Mountain View, as Lead Agency, will make the decision whether to certify the Final EIR in accordance with Section 15090 of the State CEQA Guidelines. Before the City may approve the proposed Project, it must independently review and consider the information contained in the Final EIR, certifying that the Final EIR adequately discloses the environmental effects of the HEU, that the Final EIR has been completed in conformance with CEQA, and that the decision-making body of the Lead Agency independently reviewed and considered the information contained in the Final EIR. Certification of the Final EIR would indicate the City’s determination that the Final EIR adequately evaluated the environmental impacts that could be associated with the HEU.

Once complete and certified, the Final EIR will provide the CEQA compliance documentation upon which the City of Mountain View’s consideration of, and action on, all applicable land use permits and other approvals (collectively, “approvals”) for the proposed Project may be based.

The Final EIR will also provide the CEQA compliance to be relied upon by Responsible Agencies and Trustee Agencies in considering and acting upon other project approvals under their jurisdiction.

1.2 Mitigation Monitoring and Reporting Program

Public Resources Code Section 21081.6 and State CEQA Guidelines Section 15097 (*Mitigation Monitoring or Reporting*) require public agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of specified environmental findings related to an EIR (also mitigated negative declarations). Accordingly, as Lead Agency, the City has prepared a MMRP for the proposed HEU; the MMRP is included as **Appendix A** to this document.

The intent of the MMRP is to track and successfully implement the mitigation measures identified within the Final EIR and adopted as part of the Project to avoid or mitigate significant effects on the environment. The MMRP is designed to ensure compliance with the mitigation measures during and after Project implementation. If the City decides to approve the Project, it would adopt the MMRP at the time of Project approval and would be responsible for conducting the monitoring included in the MMRP for the life of the Project. An introduction describing the components of the MMRP and terms used therein is included as part of Appendix A.

1.3 New Information in the Final EIR

Responses to comments received on the Draft EIR focus on comments that pertain to the adequacy of the analysis in the Draft EIR or to other aspects pertinent to the potential effects of the Project on the environment pursuant to CEQA. Comments that address topics beyond the purview of the EIR or CEQA are noted as such for the public record. Where comments have triggered changes to text or exhibits in the Draft EIR, these changes appear as part of the specific response and are consolidated in Chapter 4, *Errata to the Draft EIR*.

If “significant new information” is added to an EIR after a notice of public review of the Draft EIR document has been given (in this case, July 22, 2022, for the Draft EIR), but before final certification of the EIR, the Lead Agency must issue a new notice and recirculate the Draft EIR for further comment and consultation. State CEQA Guidelines Section 15088.5 (*Recirculation of an EIR Prior to Certification*), specifies the following:

“Significant new information” requiring recirculation include, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;

- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it; or
- (4) The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”

None of the changes to the Draft EIR identified in this document meet any of the above conditions. Therefore, recirculation of any part of this Final EIR not required. The information presented in the Draft EIR and this document support this determination by the City.

1.4 Organization of This Final EIR

Following this **Chapter 1, *Introduction***, this Response to Comments / Final EIR is organized as described below:

- **Chapter 2, *Updated Project Information*** – This chapter presents updates to information that pertains to the HEU.
- **Chapter 3, *Comments and Responses*** – This chapter presents a roster showing each public agency, organization, or individual that provided comments on the Draft EIR generally during the public review and comment period for the Draft EIR. This chapter also includes copies of the written comments received by email during the public review and comment period on the Draft EIR. Specific responses to the individual comments in each correspondence are provided after each letter. Finally, this chapter includes responses to verbal comments received on the Draft EIR at the City of Mountain View EPC meeting held on Wednesday, August 3, 2022. Responses are presented to summarize verbal comments, grouped by topic.
- **Chapter 4, *Errata to the Draft EIR*** – This chapter presents all updates made to provide clarification, amplification, and corrections to the text and exhibits in the Draft EIR - changes either initiated by City staff or responses to comments received during the public review and comment period on the Draft EIR. Changes that respond to specific comments are also stated or referenced in the corresponding response provided in Chapter 3, *Consolidated Comments and Responses*.
- **Appendices** –The appendices include the MMRP for the HEU.

CHAPTER 2

Updated Project Information

2.0 Introduction

This section discusses new or updated information that the City has determined relates to the City of Mountain View Housing Element Update (HEU or Project), related approvals or requirements, or other information mentioned in the Draft EIR. Although none of the updates discussed here are changes to the Project or the Draft EIR that could result in changes to the environmental analysis in the Draft EIR under CEQA, the City has decided that these changes warrant disclosure in this Response to Comments document for informational purposes for the public and decision-makers of the HEU.

None of the information in this chapter is considered “significant new information” defined in State CEQA Guidelines Section 15088.5 and requiring recirculation of any part of this Final EIR (see Chapter 1, *Introduction*).

2.1 Updates Related to the Project

2.1.1 Updates to the HEU

Based on comments received on the Draft Housing Element Update from the California Department of Housing and Community Development (HCD), changes have been made to the HEU. The changes are mainly related to the provision of programs or recategorization of information presented in the Draft HEU. None of these changes materially affect or alter the analysis or conclusions of the Draft EIR.

The sites inventory has been updated and is now 17,779 units. This change is based on several factors, which do not have a meaningful effect on the environmental impacts of the growth:

- Projects that started construction before January 2022 have been added (approximately 1,381 units). These units would have already been considered in any environmental analysis.
- Other newly submitted projects were added to the “Pipeline” list (approximately 900 units). These units comply with existing zoning and general plan designations.
- Two additional sites were added to the opportunity sites in the inventory. One site (1500 North Shoreline Boulevard) complies with existing zoning and General Plan designation,

the other (1250 Grant Road) is consistent with the rezoning adopted concurrent with the Housing Element (amendments to the Grant Phyllis Precise Plan), and is within the growth projected for its environmental analysis. The addition of these two sites results in a gain of approximately 2,000 units.

- Methodology changes and removal of some opportunity sites in the sites inventory result in a loss of approximately 1,220 units. This includes the removal of three APNs associated with 500 W El Camino Real. The other, more significant change involves the further discounting on large multi-tenant retail sites whereby an 80 percent reduction has been applied towards the realistic unit capacity. This takes a more conservative unit capacity estimate should these sites develop at lower densities than projected or with non-housing uses.

The updates to the Housing Sites Inventory fall within the growth envelope analyzed in the Draft EIR. While the number of units in the Housing Sites Inventory did increase somewhat, much of this increase is due to the inclusion of additional units that are under construction in the City and other newly submitted projects. With the removal of some opportunity sites and other development capacity-related changes, a balancing effect occurs. The Draft EIR focused on changes in development potential in the City based on amendments to the General Plan, rezonings, and programs anticipated to be adopted with the proposed HEU. The updates to the proposed HEU and Housing Sites Inventory are consistent with that development potential increase, although it is acknowledged that some additional capacity could be realized during the HEU-period that was anticipated beyond 2031 in the Draft EIR. However, the analysis considers the growth potential as a whole, so these changes would not materially affect or alter the analysis or conclusions of the Draft EIR.

CHAPTER 3

Comments and Responses

3.1 Introduction

This section contains the comment letters, emails, and oral comments received on the Draft EIR. Following each comment letter is a response by the City intended to supplement, clarify, or amend information provided in the Draft EIR or refer the reader to the appropriate place in the document where the requested information can be found. Responses focus on comments that pertain to the adequacy of the analysis in the EIR or to other aspects pertinent to the potential effects of the HEU on the environment pursuant to CEQA. Comments that address topics beyond the purview of the EIR or CEQA are noted as such for the public record. Where comments have triggered changes to the Draft EIR, these changes appear as part of the specific response and are consolidated in Chapter 4, *Errata to the Draft EIR*, where they are listed in the order that the revision would appear in the Draft EIR document.

3.2 List of Commenters

Table 3-1, below, lists each public agency, organization, and individual that provided comments on the Draft EIR generally during the public review and comment period for the Draft EIR, which began on July 22, 2022, to September 5, 2022.¹ The comments addressed in this Final EIR are presented in the order of the commenters listed below. Commenters have an alphabetic designation that corresponds to the category of commenter, such as “A” for public agencies. A number follows the alphabetic designation to indicate the sequence of the comment submissions. For example, “A-1” is the first public agency comment submission identified, as shown below. Specific comments within each correspondence also are identified by a numeric designator that reflects the numeric sequence of the specific comment within the correspondence (e.g., “A-3-3” for the third comment in Comment Letter A-3). Section 3.4, which follows later in this chapter, reproduces each letter with the numeric comment brackets indicated, followed by the responses to each comment.

¹ Due to the Labor Day holiday on September 5, 2022, comments were accepted through September 6, 2022.

**TABLE 3-1
COMMENT LETTERS RECEIVED CONCERNING THE DRAFT EIR**

Designator	Name/Entity	Author(s) of Comment Letter/e-mail	Date Received
Agencies			
A-1	Santa Clara Valley Transportation Authority (VTA)	Robert Swierk, AICP, Principal Transportation Planner	September 1, 2022
A-2	California Department of Toxic Substances Control (DTSC)	Gavin McCreary, Project Manager, Site Evaluation and Remediation Unit	September 2, 2022
A-3	Mountain View Los Altos High School District (MVLA)	Nellie Meyer, Ed.D., Superintendent	September 2, 2022
A-4	Santa Clara Valley Water District (Valley Water)	Kevin Thai, CFM, Associate Engineer – Civil, Community Projects Review Unit	September 6, 2022
Organizations			
O-1	Mountain View YIMBY	David Watson	July 31, 2022
O-2	Santa Clara Valley Audubon Society (SCVAS) & GreenSpacesMV	Shani Kleinhaus, Environmental Advocate, SCVAS & Bruce England, GreenSpacesMV	September 5, 2022
Individuals			
I-1	Hala Alshahwany		September 3, 2022

A public hearing to receive verbal comments on the Draft EIR was held at the City of Mountain View Environmental Planning Commission (EPC) meeting on Wednesday, August 3, 2022. **Table 3-2** below lists persons who provided verbal comments at the City of Mountain View EPC Public Hearing on the Draft EIR. No members of the public provided comments on the Draft EIR during the meeting. A summary of comments raised by members of the EPC during the EPC Public Hearing and responses to comments are provided in Section 3.5 below.

**TABLE 3-2
ENVIRONMENTAL PLANNING COMMISSION PUBLIC SPEAKERS AND COMMISSIONERS**

Environmental Planning Commission Public Hearing – August 3, 2022	
Public Speakers	
<ul style="list-style-type: none"> No members of the public provided comments 	
Environmental Planning Commissioners	
<ul style="list-style-type: none"> Chair William Cranston Vice Chair Joyce Yin Chris Clark Hank Dempsey 	<ul style="list-style-type: none"> Jose Gutierrez Preeti Hehmeyer Alex Nunez

3.3 Responses to Individual Comment Letters

This section includes copies of the written comments received by email during the public review and comment period on the Draft EIR. Specific responses to the individual comments in each correspondence are provided after each letter.

As described in Section 3.2 above, each correspondence is identified by an alphabetic designation that corresponds to the category of commenter, such as “O” for organizations, and a number follows the alphabetic designation to designate the sequence of the comment submissions (e.g., “O-2” for the second organization comment letter). Specific comments within each correspondence also are identified by a numeric designator that reflects the numeric sequence of the specific comment within the correspondence (e.g., “O-2-3” for the third comment in Comment Letter O-2).

Responses focus on comments that pertain to the adequacy of the analysis in the EIR or to other aspects pertinent to the potential effects of the HEU on the environment pursuant to CEQA. Comments that address topics beyond the purview of the EIR or CEQA are noted as such for the public record. Where comments have triggered changes to the Draft EIR, these changes appear as part of the specific response and are consolidated in Chapter 4, *Errata to the Draft EIR*, where they are listed in the order that the revision would appear in the Draft EIR document.

September 1, 2022

City of Mountain View
Community Development Department
Attention: Ellen Yau, Senior Planner
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540

RE: Mountain View Housing Element Update DEIR and Draft Document

Dear Ellen,

VTA appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Mountain View Housing Element Update (HEU), as well as the draft HEU document. VTA has reviewed the DEIR and draft HEU document and has the following comments:

A-1-1

Consistency of Draft HEU Document with VTA Land Use & Development Review Policy

VTA has reviewed the draft HEU document at a high level for consistency with the VTA Board-adopted Land Use & Development Review Policy (see <https://www.vta.org/programs/land-use-transportation-luti-program>). The VTA Land Use & Development Review Policy establishes a framework for VTA's involvement in local comprehensive planning and development review processes. Overall, VTA believes that the draft HEU exemplifies several of the guiding principles in VTA's policy, including "Support Transit-Supportive Development in Close Proximity to Transit" and "Prioritize Sustainable Travel Behavior." These topics are discussed further in the sections below.

A-1-2

VTA Guiding Principle to Support Transit-Supportive Development

VTA supports the direction of the HEU to concentrate many of the Opportunity Sites in the Inventory within walking distance of frequent transit services (including Caltrain, VTA light rail, and VTA Rapid and local bus service along El Camino Real) as well as shops and services. This will help increase opportunities for residents to walk, bike and take transit for daily activities, resulting in reduced Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) emissions.

A-1-3

VTA notes that a substantial percentage of the housing capacity in the draft HEU Inventory is in the North Bayshore area, which is not located on the core transit network and is not as well served by shops and services as other areas of the city. VTA is supportive of the City's efforts to balance jobs and housing within the City, and VTA encourages the City to continue its efforts to make North Bayshore a place where daily trips can be accomplished without a car, including supporting the Mountain View TMA and MVgo shuttle, supporting the

A-1-4

Mountain View Community Shuttle, continuing to prioritize transit on Shoreline Boulevard and Charleston Boulevard, and including strong Transportation Demand Management (TDM) requirements with new development in North Bayshore.

A-1-4

VTA Guiding Principle to Prioritize Sustainable Travel Behavior

VTA supports the inclusion of several policies in draft HEU Chapter 3 that prioritize the use of sustainable travel behavior including walking, bicycling and taking transit. This includes:

- Policy 1.1 to “Ensure that adequate residential land is available to accommodate the City’s RHNA, with special focus on Precise Plan areas near transit, employment centers, and services”;
- Policy 1.3 to “Maintain or improve the character and quality of neighborhoods through upgrades to existing developments, sensitively designed new developments, improved streetscapes, and better access to schools, parks, goods, services, jobs, transportation, and other needs”; and
- Policy 1.6 to “Provide incentives, such as reduced parking standards and/or reductions in other development standards and fees, to facilitate the development of housing that is affordable to lower- and moderate-income households.” VTA notes that reduced parking standards will also help incentivize the use of sustainable travel modes by residents.

A-1-5

DEIR Mitigation Measure TRA-1, Implement VMT Reduction Measures

VTA supports the inclusion of Mitigation Measure TRA-1, Implement VMT Reduction Measures, to address VMT generated by residential projects in the Housing Element Update that do not “screen out” of VMT analysis requirements. This mitigation measure should help incentivize sustainable travel behavior, building on the draft HEU polices noted above. VTA notes that the discussion of potential VMT mitigation measures in the City’s VMT guidelines in Mitigation Measure TRA-1 (on pages 4.14-23 to 4.14-24 of the DEIR) includes some measures that may primarily apply to employment projects, or where the studies supporting the VMT reductions may only provide evidence for employment projects. VTA recommends that the EIR text be revised to note this caveat.

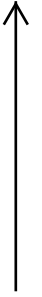
A-1-6

Preservation of Local Retail in Village Center Locations

VTA notes that the draft HEU Inventory includes a number of “Village Centers” across the City, including some along El Camino Real and some in other locations such as the Blossom Valley shopping center at Cuesta & Miramonte. VTA supports the concept of intensifying land uses at Village Centers if they are located close to frequent transit, shops and services. However, adding housing must be done carefully at these locations to prevent the loss of retail and services. The loss of these other uses could make it more difficult to walk, bike and take transit, both for residents of the newly-constructed housing and residents in nearby neighborhoods. This could increase VMT and GHG per capita, working against transportation and climate goals.

A-1-7

VTA staff has discussed this issue with City staff recently and understands that the risk of displacement or loss of local retail in these Village Center locations originates from their inclusion in the City's General Plan itself, coupled with recent housing laws which, when layered together, may have unintended consequences in terms of retail displacement. VTA encourages the City to continue to explore strategies to preserve local retail services even as needed housing development is proposed and approved in Mountain View, and VTA staff is open to further discussions on this topic.



A-1-7

Thank you again for the opportunity to review this project. Please do not hesitate to contact me at 408-321-5949 or robert.swierk@vta.org to discuss any questions you may have on this letter.

Sincerely,

Robert Swierk

Robert Swierk, AICP
Principal Transportation Planner

Letter A-1 Response: VTA, September 1, 2022

- A-1-1 This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below.
- A-1-2 Comments regarding the merits of the HEU do not raise a significant environmental issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.
- A-1-3 Comments regarding the merits of the HEU do not raise a significant environmental issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.
- A-1-4 Comments regarding the merits of the HEU do not raise a significant environmental issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.

It is noted that the City is working on transit projects, including a reversible bus lane along the Shoreline Boulevard corridor, to improve transit access to and from the North Bayshore Precise Plan area. Protected bike lanes on Shoreline Boulevard between Middlefield Road and Terra Bella Avenue and additional bike lane safety improvements are also planned to encourage non-vehicle trips. Phases 2 and 3 of the Charleston Bus Boulevard will also prioritize movement of high-occupancy modes over single occupancy vehicles in North Bayshore to incentivize higher utilization of mass transit. Additionally, the North Bayshore Master Plan will include robust Transportation Demand Management (TDM) measures and aggressive mode share targets to facilitate mode shift and meet gateway trip caps.

- A-1-5 Comments regarding the merits of the HEU do not raise a significant environmental issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.

A-1-6 The City notes this distinction and has added following footnote to the bottom of p. 4.14-24 of the Draft EIR (new text is underlined):

¹ Some of the measures may primarily apply to employment projects or have studies supporting the VMT reductions that only provide evidence for employment projects. These measures are included for consideration for mixed-use residential projects.

A-1-7 Comments regarding the merits of the HEU do not raise a significant environmental issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.

As discussed in Draft EIR Section 4.14, on General Plan Village Center and El Camino Real Village Center retail sites, the retail development would be replaced on-site as part of a mixed-use residential/retail development. The zoning updates at these sites would require the provision of retail or similar neighborhood-serving uses, at a minimum, an amount to replace the existing commercial floor area or as determined by an analysis of typical amounts of such uses in the underlying zone.



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

Comment Letter A-2

SENT VIA ELECTRONIC MAIL

September 2, 2022

Governor's Office of Planning & Research

Sep 02 2022

STATE CLEARINGHOUSE

Ms. Ellen Yau
Senior Planner
City of Mountain View
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540
Ellen.Yau@mountainview.gov

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF MOUNTAIN VIEW
HOUSING ELEMENT – DATED JULY 2022 (STATE CLEARINGHOUSE NUMBER:
2022020129)

Dear Ms. Yau:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for the City of Mountain View Housing Element (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

A-2-1

DTSC recommends that the following issues be evaluated in the Hazards and Hazardous Materials section of the EIR:

1. A State of California environmental regulatory agency such as DTSC or Regional Water Quality Control Board (RWQCB), or a qualified local agency that meets the requirements of [Assembly Bill 304 \(AB304\)](#) should provide regulatory concurrence that any of the sites proposed for housing are safe for construction and the proposed use.
2. The EIR acknowledges that historic and future activities on or near the proposed housing sites have resulted in the release of hazardous wastes/substances and are documented on DTSC's Envirostor and the RWQCB's Geotracker databases.

A-2-2

A-2-3

The EIR also identifies other past and future activities, including past agricultural practices and removal of existing structures, that could potentially result in the release of hazardous wastes/substances. In instances in which releases have occurred or may occur, at sites not already overseen by DTSC, RWQCB, or other AB304 approved agencies, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

A-2-3

3. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.

A-2-4

4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with [DTSC's 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers.](#)

A-2-5

5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to [DTSC's 2001 Information Advisory Clean Imported Fill Material.](#)

A-2-6

6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for

A-2-7

organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 [Interim Guidance for Sampling Agricultural Properties \(Third Revision\)](#).

↑
A-2-7

DTSC appreciates the opportunity to comment on the EIR. Should you choose DTSC to provide oversight for any environmental investigations, please visit DTSC's [Site Mitigation and Restoration Program](#) page to apply for lead agency oversight. Additional information regarding voluntary agreements with DTSC can be found at [DTSC's Brownfield website](#).

A-2-8

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,



Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Letter A-2 Response: DTSC, September 2, 2022

A-2-1 This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. The comments regarding the components of the proposed Project are noted and are consistent with the discussion in Chapter 3, *Project Description*, of the Draft EIR. This comment raises neither significant environmental issues nor specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088.

A-2-2 The City agrees that in the event that hazardous materials are identified at a given development site at concentrations above regulatory action levels, the appropriate regulatory agency should be engaged to oversee investigation and cleanup. This is consistent with the regulations summarized in Section 4.8.3, *Regulatory Setting*, in Section 4.8, *Hazards and Hazardous Materials*.

A-2-3 Consistent with the above Response to Comment A-2-2, the City agrees that for sites where information is identified that indicates the potential to encounter hazardous materials at concentrations above regulatory action levels, those sites will require investigation consistent with the regulations and Mitigation Measure HAZ-1 described in Section 4.8, *Hazards and Hazardous Materials*. In the event that hazardous materials are identified at concentrations above regulatory action levels, cleanup would be required to address the hazardous materials. The Draft EIR identifies mechanisms to initiate investigation and remediation, if needed, as discussed below. No edits for the Draft EIR are needed to respond to this comment.

The City of Mountain View Standard Conditions of Approval require the project applicant to prepare a Toxic Assessment report as part of the building permit submittal, demonstrating that hazardous materials do not exist on the site or that construction activities and the proposed use of this site are approved by any regulatory agencies 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.

Mitigation Measure HAZ-1, *Phase I Environmental Site Assessment*, requires that the project applicant prepare a Phase I environmental site assessment in accordance with American Society for Testing and Materials Standard E1527 for listed hazardous materials sites. The Phase I assessment would evaluate whether a proposed development site has or may have environmental issues that could affect the development of the site.

- A-2-4 As discussed above in Responses to Comment A-2-3, the City has established mechanisms that require project applicants to evaluate proposed development sites for hazardous materials, which would include testing for aeriially-deposited lead in the event that the proposed project proposes ground-disturbing work in roadways.
- A-2-5 See Responses to Comments A-2-2 and A-2-3. No edits for the Draft EIR are needed to respond to this comment.
- A-2-6 The City agrees that project applicants must demonstrate that imported fill does not contain hazardous materials at concentrations above regulatory action levels. This information would be required as part of the building permit submittal discussed above in the Response to Comment A-2-3.
- A-2-7 See Responses to Comments A-2-2 and A-2-3. No edits for the Draft EIR are needed to respond to this comment.
- A-2-8 This is a general comment that includes concluding remarks and provides resources for future consultation and program review. The City appreciates this information and looks forward to working with DTSC on future projects.

September 2, 2022

Comment Letter A-3

City of Mountain View
Community Development Department
Attn: Ellen Yau
500 Castro Street, PO Box 7540
Mountain View, CA 94039-7540
Ellen.Yau@mountainview.gov

RE: Mountain View-Los Altos Union High School District Comment Letter on the Draft EIR
for the City of Mountain View Housing Element Update

Dear Ms. Yau:

The Mountain View-Los Altos Union High School District (“District”) hereby submits its comments on the City of Mountain View’s (“City”) Draft Environmental Impact Report (“Draft EIR”) for the City of Mountain View Housing Element Update (“Project”). The District’s comments concern the need to provide assurances that funding for new schools to serve the Project area will be in place and the unstudied Project impacts on the Districts’ schools will be analyzed. As a result, the Draft EIR needs revision and recirculation to disclose the significant new information to the public and allow comment on the new information and realistic mitigations for already-known unmitigated impacts from the Project.

The District must mention that it has actively collaborated with the City for years, but the City has not reciprocated with that same level of collaboration. In fact, the District feels it has been repeatedly ignored. That is especially true, now, when the City is considering housing that will generate 2,930 students to the District’s schools. The District’s alarm over the years has now reached a panic level. In order for the Project to be successful, the City must understand that school infrastructure is not an afterthought and must be a forethought and considered now. Many of the District’s concerns in this letter could have been resolved earlier had the City consulted long ago with the District.

The District is comprised of (i) two comprehensive high schools, Los Altos High School and Mountain View High School, which have consistently been ranked in the top 500 high schools nationally; (ii) an alternative high school, Alta Vista, that the State Department of Education has repeatedly honored as a Model Continuation High School; and (iii) an Adult School that provides vital educational and social

A-3-1



services that enable residents to improve their lives and prepare for well-paying and fulfilling careers. The District prides itself on ensuring the best quality education for all its students. With the City’s assistance, the District can ensure a high-quality education for incoming students generated by the Project.

A-3-1

Although this letter is technical in nature due to the subject matter, the District wishes to emphasize that its comments are meant to help the City fully evaluate and mitigate the potential impacts to the schools. The District desires mutual cooperation and collaboration with the City to ensure the continued high quality of life in the City and education in its schools.

Draft EIR Comments

Although the Project is expected to generate 15,000 new residences and 2,930 new students to the District’s schools, the Draft EIR fails to analyze any impacts on the District’s schools except to say that the school developer fees will mitigate any impacts. SB 50 declares that the payment of the developer fees (“Developer Fees”) authorized by Education Code section 17620 constitutes “full and complete mitigation of the impacts of any legislative or adjudicative act on the provision of adequate school facilities.” (Gov. Code § 65995(h); see, *Id.* § 65996(a).) However, California courts have since acknowledged that Developer Fees do not constitute full and complete mitigation for school-related impacts unrelated to school capacity. (*Chawanakee Unified Sch. Dist. v. Cty. Of Madera* (2011) 196 Cal.App.4th 1016.) For example, the Court identified traffic, air quality, and noise impacts that must be considered in the Draft EIR. (*Id.* at p. 1029.) Since school facilities are a critical part of any residential development and are a critical part of this Project, the City must consider the impacts on the District’s schools throughout the Draft EIR impact categories.

A-3-2

I. Hazards and Hazardous Materials

On page 4.8-22, the Draft EIR attempts to analyze whether the Project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Draft EIR only identifies and analyzes the impacts on 10 schools, but it omits the District’s Mountain View High School site. Thus, the Draft EIR must also analyze the hazards and hazardous materials impacts on the District’s Mountain View High School site and revise this section accordingly.

A-3-3

II. Public Services

The Draft EIR states that adherence to General Plan Policies POS-5.3 and POS-5.4 would reduce the potential effects to school facilities associated with increased enrollment as a result of the population growth. POS-5.3 is to ensure school facilities are constructed to serve community needs to the extent allowed by state law. POS-5.4 requires the City to collaborate with local school districts on their facility needs and provide information on development and growth trends. Additionally, General Plan Policy POS-5.2 requires collaboration with the District on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds. Because the District is already over capacity and the Project will increase capacity, in line with the

A-3-4



above policies, the City must consult with the District to ensure that school facilities that need to be expanded or created are identified in the Project and adequately funded to meet these General Plan policies.

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A-3-4

Further, the Draft EIR underestimated the capacity impacts of the Project on the District’s schools. The Draft EIR states that the District’s student enrollment was approximately 4,563 students for the 2020-2021 school year and the existing capacity at the schools is 3,287, which according to the Draft EIR puts the District over capacity, currently, by 1,276 students. Per the Draft EIR, the Project will then add an additional 2,930 students, which would put the District over capacity by 4,206 students.

A-3-5

To put how impactful the added students is into perspective, the enrollment at the District’s two comprehensive high schools is 2,220 students at Mountain View High School and 2,125 students at Los Altos High School, so the additional 2,930 students generated by the Project could support an entirely new high school site, with potential redistribution of students among those three comprehensive high schools. Therefore, the City must revise this section to correctly analyze the capacity impacts from the Project and the resulting environmental impacts of that redistribution (e.g., traffic).

A-3-6

To reiterate, the Draft EIR simply states that payment of Developer Fees constitutes full and complete mitigation of school impacts from development. Even though payment of Developer Fees legally mitigates capacity needs at schools, the reality is Developer Fees are insufficient to construct new classrooms and school sites. This is due largely to the facts that statutory Developer Fees are set by statute (Gov. Code § 65995) and fail to acknowledge the differences in costs of school construction from one school district to another. This particularly burdens school districts in high cost of living areas, like the City, where both land and construction costs drastically exceed other parts of the state. Developer Fees fail to contemplate the special facilities needs of the districts experiencing rapid growth. Without adequate funding, the increase in students, combined with the already over capacity schools may require the District to spend valuable resources on temporary solutions to the District’s facilities problems, such as the purchase or lease of portable classrooms to house the new students.

A-3-7

Further, payment of Developer Fees does not mitigate the Project’s significant impacts on the District’s schools concerning air quality, noise, pedestrian safety, traffic and transportation, utilities, and any other environmental impacts. (*Chawanakee Unified Sch. Dist. v. Cty. Of Madera* (2011) 196 Cal.App.4th 1016.) These must be analyzed and provided for in a recirculated draft EIR.

A-3-8

III. District Consultation

Pursuant to Government Code sections 65352 and 65352.2, the City is required to coordinate planning of school facilities with school districts. Specifically, Government Code section 65352 (a) (2) states “before a legislative body takes action to adopt or substantially amend a general plan, the planning agency shall refer the proposed action to . . . an elementary, high school, or unified school district within the area covered by the proposed action.” Government Code section 65352.2 (d)(2) advises the local agency and school district to review and consider “[o]ptions for the siting of new schools whether or not the local city or counties existing land use element appropriately reflects the demand for public

A-3-9
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school facilities and ensures that new planned development reserves location for public schools in the most appropriate locations.” The legislature’s intent was clear that local agency planning should include siting of school sites and coordination between the City and District.

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A-3-9

Further, over the past few years, the District has consulted with the City on the potential siting of a new high school site at the 17-acre parcel of land located at West Middlefield Road and Moffett Boulevard (the “Shenandoah Property”), currently owned by the United States Department of Army (“Army”). Since District’s schools are already over capacity, the District has a substantial need for the Shenandoah Property. Thus, although the City and Army may also have needs for the Shenandoah Property, the City should identify this site in its Draft EIR as a potential new high school site, regardless of recent, unbinding comments from the property owners.

A-3-10

IV. Transportation

Although the California Environmental Quality Act (“CEQA”) no longer considers vehicle delay as a significant impact, potential educational disruption and safety impacts are still required where increased traffic and congestion causes secondary impacts to students’ education and safety hazards for pedestrians, bicyclists, and other traffic. The Draft EIR did not analyze the Project’s potential addition to, and delay of, bus and automobile drop-off and pick-up activities at the District’s schools. The added delay could disrupt the educational day and contribute to more frequent absences. Such disruptions would detract from the most effective educational program. The District understands that this is only a Program EIR, but the City must ensure that prior to approving any of the 15,000 housing units, the above transportation impacts have been analyzed and mitigated, where necessary. The City should also include the following mitigation measure or a similar one to mitigate traffic impacts to the District’s schools: “Payment of fair share costs by a developer for traffic and transportation impacts shall be made prior to issuance of a building permit.”

A-3-11

Further, because the Project anticipates an increase of 15,000 new residences to the City and 2,930 new students into the District, the Draft EIR must include analysis of the safety impacts of increased vehicle traffic and student pedestrian traffic to and from the District’s school sites, especially considering that the District’s schools and surrounding infrastructure and housing, were not built to sustain an additional 2,930 students. Thus, the Draft EIR must be revised with an analysis of the Project’s impacts on the vehicle movements to and from the District’s schools, impacts on pedestrian traffic to and from the District’s schools and circulation and congestion during student drop-off and pickup.

A-3-12

Although the Draft EIR articulates a General Plan Policy MOB-6.1 to promote Safe Routes to Schools programs for schools serving the City, it does not actually analyze whether there are impacts on the school routes and safety of students traveling to and from the school sites during construction and Project operation. (Draft EIR, p. 4.14-19.) The Draft EIR must include this analysis and whether there are adequate safety features, such as sufficiently sized sidewalks, bike lanes, crosswalks, stop signs, traffic signals, etc. Without additional analysis, there is no way to confirm whether the Project will have less than significant transportation and secondary impacts upon the District’s school operations.

A-3-13
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The City should also include the following mitigation measure or a similar one to mitigate pedestrian safety impacts: “Payment of fair share costs by a developer for pedestrian wayfaring improvements that adhere to Safe Routes to Schools shall be made prior to issuance of a building permit.”

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A-3-13

V. Conclusion

The District desires that the Project’s potential significant impacts to the students, parents, faculty, and staff of the District’s schools are fully analyzed and mitigated. Given the lack of analyses in the Draft EIR, the District respectfully requests that the Draft EIR be revised to include those analyses and mitigation measures, as set forth herein and recirculated per the requirements of CEQA.

A-3-14

Sincerely,
Nellie Meyer, Ed.D.
Superintendent

cc: City of Mountain View City Council
City of Mountain View Environment Planning Commission
City of Mountain View City Manager
MVLA Board of Trustees



Letter A-3 Response: MVLA, September 2, 2022

A-3-1 This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. To the extent the comment relates to the merits of the Project it is forwarded to the decision makers for consideration.

Based on the City's Regional Housing Needs Assessment (RHNA) allocation mandated by the State, the HEU plans for an additional 11,135 dwelling units plus a sizeable "buffer." The Draft EIR evaluated the potential for approximately 15,000 multi-family housing units (including approximately 96 accessory dwelling units) during the HEU planning period as a maximum scenario for purposes of the CEQA evaluation, understanding that the buffer size and the final sites selected for inclusion in the Housing Element will be determined by the City Council upon adoption of the HEU. Of this, approximately 13,600 units are already allowed under the City's adopted General Plan, zoning, and Precise Plans and the remaining 1,400 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately 2,700 units beyond 2031. The City is required by State law to adopt a HEU to meet the RHNA.

This EIR is a Program EIR, which has been prepared to evaluate the anticipated environmental effects of the proposed HEU in conformance with the provisions of CEQA and the CEQA *Guidelines*. As a program EIR, this EIR analyzes potential impacts of development that would be allowed by the HEU without having site-specific development proposals in hand, and broadly considers proposed sites, their environmental setting, and potential impacts that could stem from their development. Readers will note that the level of detail is different than in a project-specific EIR, which generally considers a single, specific proposal on an individual site. Future discretionary actions that would be facilitated by the HEU's adoption, such as those related to the development of housing, would be assessed to determine consistency with the analysis provided in this program EIR.

The Draft EIR discussed school facilities for MVLA in Section 4.13, *Public Services and Recreation*. Consistent with the comment and as described in the Draft EIR, all 15,000 units projected during the HEU planning period would conservatively generate approximately 2,930 students for MVLA schools, using the RHNA allocation percentages for above and below market-rate units (Draft EIR p. 4.13-16). However, as explained more in Response to Comment A-3-6 below, the capacity increase is also analyzed in the Draft EIR in context of the changes to development capacity in the City proposed as part of the HEU. Of the new units, only a small percentage (approximately 1,250 units in the sites inventory and 2,850 units beyond 2031) would result from changes in City policy, zoning, or Precise Plans, and the

balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans.

As also discussed further in Response to Comment A-3-2 below, Senate Bill (SB) 50 authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities and restricts the ability of the City to deny project approvals on the basis that public school facilities are inadequate. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. As such, the City cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities. Nonetheless, the City will continue to collaborate with the District on their facility needs and provide information on development and growth trends as well as ensuring school facilities are constructed to serve community needs to the extent allowed by State law.

This comment raises neither new significant environmental issues nor specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088.

- A-3-2 Potential impacts of the HEU on schools, including MVLA schools, were discussed in Section 4.13, *Public Services and Recreation*, of the Draft EIR in accordance with the requirements of CEQA. Importantly, and as discussed in the Draft EIR, CEQA's treatment of public services impacts is narrowly defined to include only those impacts that would arise from the provision of new or physically altered governmental facilities, *the construction of which could cause significant environmental effects* (emphasis added). The precise significance criteria used in Section 4.13 of the Draft EIR, and also in CEQA Guidelines Appendix G (XV)(a) asks:

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; and 5) Other public facilities?

CEQA regulations and applicable case law on this issue demonstrate the threshold concerns only the environmental effects associated with the provision of new or altered physical public service facilities.² School capacities, service ratios, and other performance objectives are relevant to the analysis only within the context of whether or not new or expanded facilities would be required to meet defined criteria related to

² CEQA Guidelines Section 15382 restricts the effects that CEQA mitigation addresses to those "significant effects on the environment" which are defined to include "adverse change in any of the physical conditions within the area affected by the project" "An economic or social change by itself shall not be considered a significant effect on the environment." 14 Cal. Code Regs. §15382.

those service objectives, and what the environmental effects would be of providing those facilities.

The Draft EIR addressed impacts to public services within this legally-defined context in Section 4.13 of the Draft EIR. The Draft EIR described that the HEU would result in an increase in school-aged children enrollment in MVLA schools which would worsen an existing capacity exceedance. As such, facility updates to increase capacity would also likely be required. However, the new students would be added to the district-wide enrollment of MVLA schools incrementally over time, if and when development occurs, and any expansion of school facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational environmental effects of those facilities. Compliance with General Plan policies and payment of school impact fees were also acknowledged in the Draft EIR (p. 4.13-16) to reduce the social and economic impacts of the HEU (that is, the non-CEQA impacts of the HEU).

As discussed in Section 4.13.3 of the Draft EIR, the Leroy F. Greene School Facilities Act of 1998, or SB 50, authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities, and restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional school facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities. However, indirect impacts related to school attendance or construction of new facilities must still be considered under CEQA (e.g., indirect impacts on traffic, air quality, noise).

Indirect impacts to schools were considered throughout the Draft EIR. Schools were included as “sensitive receptors” in the air quality section of the Draft EIR (see Draft EIR Section 4.2) and as “noise-sensitive land uses” in the noise section of the Draft EIR (Draft EIR Section 4.11). Impacts related to hazardous materials, substances, or waste in proximity to schools were also analyzed in Section 4.8, *Hazards and Hazardous Materials*, of the Draft EIR. Section 4.14, *Transportation*, analyzed impacts relative to conflicts with a program, plan, ordinance or policy addressing the circulation system, including City General Plan Policy MOB-6.1, which promotes Safe Routes to Schools (SRTS) programs for all schools serving the City (Draft EIR p. 4.14-18-19). Additionally, residential-generated VMT includes vehicle travel for school trips, and trip reduction measures are included in Mitigation Measure TRA-1.

Trip reduction measures are intended to apply broadly in the City and include goals to reduce transportation-related impacts to schools.

- A-3-3 Section 4.8, *Hazards and Hazardous Materials*, has been revised to include Mountain View High School and other public schools inadvertently left off of the list of public schools. The Draft EIR on p. 4.8-6 has been corrected consistent with the above (new text is underlined):

Proximity to Schools

The following public schools are located in Mountain View:

- Stevenson Elementary School at 750 San Pierre Way
- Theuerkauf Elementary School at 1625 San Luis Avenue
- ~~Waldorf School of the Peninsula at 180 North Rengstorff Avenue~~
- Landels Elementary School at 115 West Dana Street
- Mariano Castro Elementary School at 500 Toft Street
- ~~St. Joseph Mountain View at 1120 Miramonte Avenue~~
- Monta Loma Elementary at 460 Thompson Avenue
- Springer Elementary School at 1120 Rose Avenue
- Benjamin Bubb Elementary School at 525 Hans Avenue
- Amy Imai Elementary School (previously Huff) at 253 Martens Avenue
- Mountain View High School at 3535 Truman Avenue
- Alta Vista High School at 1325 Bryant Avenue
- Vargas Elementary School at 220 N Whisman Road
- Mistral Elementary School at 505 Escuela Avenue
- Graham Middle School at 1175 Castro Street
- Crittenden Middle School at 1701 Rock Street

A number of private schools including Waldorf School of the Peninsula (180 North Rengstorff Avenue), St. Joseph Mountain View (1120 Miramonte Avenue), St. Francis High School (1885 Miramonte Avenue), German International School of Silicon Valley (310 Easy Street), Mountain View Academy (360 S Shoreline Blvd), St. Stephen Lutheran School (320 Moorpark Way), and Khan Lab School (1200 Villa Street) are also located in the City. There is also a proposed new school site for the Los Altos School District located at the corner of California Street and Showers Drive.

The Draft EIR on p. 4.8-22 has also been corrected consistent with the above (new text is underlined; deleted text is shown in ~~striketrough~~):

As discussed in Section 4.8.2, *Environmental Setting, Proximity to Schools*, there are ten-14 public schools and a number of private schools located within Mountain View. The accidental release or spill of hazardous materials transported through the vicinity near schools could expose school children and staff to hazardous materials.

See Final EIR Chapter 4, *Errata to the Draft EIR*, for the revised language. These editorial changes do not alter the conclusions of the EIR.

A-3-4 The comment references City General Plan policies POS-5.2, POS-5.3, and POS-5.4. The policies are listed in the *Regulatory Setting* of Section 4.13, *Public Services and Recreation*, of the Draft EIR (p. 4.13-9). As discussed in the Draft EIR, the City's adherence to General Plan Policy POS-5.3 and POS-5.4, described under Section 4.13.3 would reduce the potential social and economic effects to school facilities associated with increased enrollment as a result of population growth (Draft EIR p. 4.13-16).

Pursuant to these polices, and as noted in Section 4.13.3 of the Draft EIR, the City will cooperate with the school districts to:

- ensure that school facilities are constructed to serve community needs to the extent allowed by state law
- collaborate with school districts on their facilities needs and provide information on development and growth trends.

A-3-5 As discussed in Section 4.13, the Draft EIR acknowledges that school year 2020-2021 MVLA enrollment exceeded the capacity described in the *2020 MVLA Developer Fee Study*, and that the addition of potential school-aged children enrollment as a result of the HEU would worsen this existing capacity exceedance (Draft EIR p. 4.13-16). As such, the Draft EIR does not underestimate the capacity impacts on MVLA schools. See also Response to Comment A-3-6 below, which explains the capacity increase in context of the changes to development capacity unit the City proposed as part of the HEU. Of the new units, only a small percentage (approximately 1,250 units in the sites inventory and 2,850 units beyond 2031) would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans.

A-3-6 As discussed in Response to Comment A-3-2, CEQA regulations and applicable case law on this issue demonstrate the threshold concerns only the *environmental* effects associated with the provision of new or altered physical public service facilities.³ School capacities, service ratios, and other performance objectives are relevant to the analysis only within the context of whether or not new or expanded facilities would be required to meet defined criteria related to those service objectives, and what the environmental effects would be of providing those facilities.

As discussed in Chapter 3, *Project Description*, future development on identified sites identified in the HEU would continue to be at the discretion of individual property owners and will be largely dependent on market forces and -- in the case of affordable housing -- available funding and/or other incentives (Draft EIR p. 3-12). The Draft EIR analyzes the impacts associated with the site inventory to 2031, an increase in approximately 15,000 dwelling units, focused primarily along the commercial corridors and in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing. Of this, approximately 13,600 units are already allowed under the City's adopted General Plan, zoning, and Precise Plans and the remaining 1,400 units would be created through rezonings and General Plan amendments. The EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately 2,700 units beyond 2031 (Draft EIR p. 3-11). As such, the Draft EIR acknowledges two student generation scenarios: (1) new units enabled by changes in development capacity via rezoning which would conservatively generate approximately 1,279 new students for MVLA schools, assuming the use the MVLA's below market rate multifamily unit student generation rate for all units; and (2) all 15,000 units projected during the HEU planning period which would conservatively generate approximately 2,930 students.⁴

Of the new units, only a small percentage (approximately 1,250 units in the sites inventory and 2,850 units beyond 2031) would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. As noted above, the 1,279 new students estimated as a result of 4,100 new units enabled by changes in development capacity via rezoning presented the most conservative scenario through the assumption that all of these units would generate students at MVLA's below market rate multifamily unit student generation rate for all units.

³ CEQA Guidelines Section 15382 restricts the effects that CEQA mitigation addresses to those "significant effects on the environment" which are defined to include "adverse change in any of the physical conditions within the area affected by the project" "An economic or social change by itself shall not be considered a significant effect on the environment." 14 Cal. Code Regs. §15382.

⁴ It is noted that per the updates to the HEU and Housing Sites Inventory (described in Chapter 2 of this FEIR), that the sites inventory has been updated and is now 17,779 units. While the number of units in the Housing Sites Inventory did increase somewhat, much of this increase is due to the inclusion of additional units that are under construction in the City and other newly submitted projects. With the removal of some opportunity sites and other development capacity-related changes, a balancing effect occurs. The Draft EIR focused on changes in development potential in the City based on amendments to the General Plan, rezonings, and programs anticipated to be adopted with the proposed HEU which remains 4,100 units. As such, these changes do not materially affect or alter the analysis or conclusions of the Draft EIR

However, it is noted that multifamily units would likely include a portion of what the MVLA would consider market rate units, resulting in slightly lower student generation rates. For example, assuming 85 percent of the 4,100 units develop as below market rate units, approximately 1,117 students would be anticipated as a result of new units enabled by changes in development capacity via rezoning.⁵ Additionally, 2,850 of the units would represent the increase in housing production from rezonings and General Plan Amendments beyond 2031, or outside of the planning period of the HEU (considered more long-term). The 1,250 units enabled by changes in development capacity via rezoning within the HEU planning period (considered more near-term) would generate approximately 390 new students for MLVA schools, conservatively using the MVLA's below market rate multifamily unit student generation rate for all units.

The Draft EIR described that the HEU would result in an increase in school-aged children enrollment in MVLA schools which would worsen an existing capacity exceedance. As such, facility updates to increase capacity would also likely be required. However, the new students would be added to the district-wide enrollment of MVLA schools incrementally over time, if and when development occurs, and any expansion of school facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities (Draft EIR p. 4.13-16). As such, facility updates to increase capacity are acknowledged in the Draft EIR as likely to occur. However, due to the incremental nature of development under the proposed HEU and that the District's most recent long-term Facilities Master Plan⁶ does not identify the need for a new school site given its forecast peak enrollment of 5,023 students in school year 2021-22, it would be speculative to assume where a new school site may be needed to accurately depict potential environmental impacts resulting from a new school site.

As discussed in Response to Comment A-3-2 above, indirect impacts to schools, including transportation, were considered throughout the Draft EIR. See also Responses to Comments A-3-11 through A-3-13 for specific responses to transportation-related comments raised below.

Regardless, any additional residential development in the City would proceed with the full expectation of the District's involvement in the development process in a manner that meets the needs of the District and the students it serves.

A-3-7 The commenter's assertion that SB 50 fees are financially inadequate is an economic consideration which is outside of CEQA's purview. As discussed in Response to

⁵ As described on Draft EIR p. 4.13-16, the MVLA uses a student generation rate of 0.047 9-12 grade students for market rate multifamily residential units and a student generation rate of 0.312 9-12 grade students for below market rate multifamily residential units based on the *Mountain View Los Altos Union High School District Response to the Notice of Preparation for the EIR*, March 8, 2022.

⁶ MLVA, 2018. *Mountain View Los Altos High School District Master Plan*, March 3, 2018. Available at: <https://www.mvla.net/documents/About-MVLA/District-Plans--Reports/MVLA-Facilities-Master-Plan-Final.pdf>.

Comment A-3-2 above, SB 50 authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities and restricts the ability of the City to deny project approvals on the basis that public school facilities are inadequate. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. As such, the City cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities. The City will continue to collaborate with the District on their facility needs and provide information on development and growth trends as well as ensuring school facilities are constructed to serve community needs to the extent allowed by State law.

A-3-8 See Response to Comment A-3-2 regarding indirect impacts related to schools that were analyzed in the Draft EIR, including those related to air quality, noise, transportation, and hazards and hazardous materials. See also Responses to Comments A-3-11 through A-3-13 for specific responses to transportation-related comments raised below. Additionally, as discussed in Section 4.2, *Air Quality*, the air quality analysis prepared in the Draft EIR related to criteria air pollutants was a plan-level analysis, consistent with Bay Area Air Quality Management District (BAAQMD) recommendations. As such, the significance of the impact of criteria air pollutant emissions generated were based on consistency with regional air quality planning, including an evaluation of population growth and growth in VMT. Any resulting indirect impacts on schools would therefore be subsumed in this analysis. Additionally, project applicants proposing projects that exceed BAAQMD screening levels would be required to prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. Regarding utilities, any increased demand for utilities service related to schools would be considered incremental and would not rise to a level where a service provider could not provide service or where new utility facilities would be constructed that would result in significant environmental effects due to construction or relocation.

Regarding the statement that the Draft EIR should be revised and recirculated, while information has been added to the Draft EIR in response to comments and as City-initiated updates (see Chapter 4 of this document), no significant new information (e.g., as defined in CEQA Guidelines Section 15088.5 as information leading to identification of a new significant impact or a substantial increase in the severity of an impact) has been identified since publication of the Draft EIR and, consequently, there is no basis for the District's request that the Draft EIR be recirculated.

A-3-9 See Response to Comment A-3-4 regarding City policies that require consultation with school districts. As noted in Response to Comment A-3-4, pursuant to these policies, and as noted in Section 4.13.3 of the Draft EIR, the City will continue to cooperate with the school districts to: (1) ensure that school facilities are constructed to serve community needs to the extent allowed by state law; and (2) collaborate with school districts on their facilities needs and provide information on development and growth trends. Notice of the proposed HEU and a 45-day comment period was

provided pursuant to Government Code §65352 to the MVLA. It is the City's continued expectation that any additional residential development in the City would proceed in partnership with MVLA.

- A-3-10 Identification of a school site is not part of the purview of this EIR. A school district through its school facilities planning process may identify a site, and at such point, the City (pursuant to the General Plan policies listed in Response to Comment A-3-4 and discussed in the Draft EIR under Section 4.13.3) will continue to collaborate with the schools district on their facility needs and provide information on development and growth trends as well as ensuring school facilities are constructed to serve community needs to the extent allowed by state law. Furthermore, the referenced "Shenandoah Property" is located outside of city limits and is not under control of the City, as it is owned by the United States Department of the Army. As such, it is not appropriate for the City to identify this site as a potential school site in the Draft EIR.

MVLA would be expected to lead the siting of any new school location and the City would collaborate with the District to achieve its facilities goals, as outlined in the City's General Plan policies. If and when a proposal is formalized to develop the site (or any other site) for the District's use, appropriate environmental review would be required to determine the environmental effects of the undertaking, in compliance with CEQA and other applicable regulations.

- A-3-11 Traffic congestion or measures of vehicular delay are not an environmental impact under CEQA per State CEQA Guidelines Section 15064.3. As discussed in Response to Comment A-3-2, Draft EIR Section 4.14, *Transportation*, analyzed impacts relative to conflicts with a program, plan, ordinance or policy addressing the circulation system, including City General Plan Policy MOB-6.1, which promotes Safe Routes to Schools programs for all schools serving the City. Implementation of the HEU would be subject to and implement General Plan policies applicable to transit, bicycle, and pedestrian facilities and service, and development projects under the HEU would be subject to all applicable City guidelines, standards, and specifications related to transit, bicycle, or pedestrian facilities (Draft EIR p. 4.14-18-19).

As also discussed in Response to Comment A-3-2 and Response to Comment A-3-6, performance objectives for schools are relevant to the analysis only within the context of whether or not new or expanded facilities would be required to meet defined criteria related to those service objectives, and what the environmental effects would be of providing those facilities.

Regarding the suggested mitigation measure, the City's Standard Conditions of Approval (Transportation Impact Fee) require that project applicants pay the City's Transportation Impact Fee for the development prior to the issuance of any building permits and prior to approval of the parcel or final map. The City's Transportation Impact Fee (City Code Chapter 43) is based on the *City of Mountain View*

Multimodal Improvement Plan Traffic Impact Fee Nexus Study (2018) which established the required nexus between anticipated future development in the City and the need for certain improvements to the local transportation facilities. Transportation improvements are intended to provide adequate transportation infrastructure that is needed to protect the health, safety, and general welfare of the citizens to facilitate access to jobs, homes, schools, goods, and services (see Section 43.3).

Regarding the request for a specific transportation fee “to mitigate traffic impacts to the District’s schools”, the City does not have an adopted fee for this issue, nor is it aware of any precedent for such a fee. Establishment of a fee would require identification of an impact, a nexus study, and determination of proportionality. Due to the nature of the proposed Project and lack of detail on specific projects that could be developed under the HEU, the extent of any potentially necessary improvements is not known, and as such it is unclear whether such a fee would be legal under the Mitigation Fee Act (Gov’t Code §§ 66000 – 66025) and Assembly Bill 602 (2021).

See also Response to Comment A-3-13 regarding specific transportation analysis required for development projects during the City’s entitlement process.

A-3-12 As discussed in Response to Comment A-3-11, development projects under the HEU would be subject to all applicable City guidelines, standards, and specifications related to transit, bicycle, or pedestrian facilities, including General Plan Policy MOB-6.1, and Policy MOB 1.6, which provides traffic calming, especially in neighborhoods and around schools, parks and gathering places. Traffic congestion or measures of vehicular delay are not an environmental impact under CEQA per State CEQA Guidelines Section 15064.3.

A-3-13 See Responses to Comments A-3-11 and A-3-12. Development projects proposed under the HEU that generate at least 20 net new peak-hour trips (or those within a Precise Plan area) would require completion of a Multi-modal Transportation Analysis (MTA) during the entitlement process. The MTA would ensure that the proposed development conforms with City policies (including traffic calming, neighborhood intrusion, and enhancing publicly accessible bicycle, pedestrian, and transit connections), that adequate multimodal site access and circulation are provided to local schools serving the proposed residential projects, appropriate fair-share fees are identified, and that operational improvements support pedestrian, bicycle, and transit quality of service.

Additionally, the City has an ongoing commitment to fund the Safe Routes To School (STRS) program and have been working with the school districts to ensure that students receive safety training. The City’s SRTS program also include ongoing infrastructure planning and improvement in the vicinity of schools, including walking audits. Proposed projects will also comply with the City’s Comprehensive Modal

Plan, AccessMV, to ensure proper analysis of the potential impacts on the bicycle level of traffic stress, pedestrian quality of service, potential transit demand, and vehicle conditions under existing and planned development scenarios. Additionally, the City's commitment to ending traffic fatalities and serious injuries on Mountain View roadways through Vision Zero is reflected in the STRS program, the Local Road Safety Plan, and forthcoming Active Transportation Plan (ATP)—all of which focus on delivering roadway improvements and safety counter-measures along the Safe Routes to School network.

- A-3-14 This is a general comment that includes concluding remarks, and reiterates comments made above. As a result, no specific response is given here. Pursuant to the impacts related to the scope of the EIR, these have been adequately analyzed.

Regarding the statement that the Draft EIR should be revised and recirculated, while information has been added to the Draft EIR in response to comments and as City-initiated updates (see Chapter 4 of this document), no significant new information (e.g., as defined in CEQA Guidelines Section 15088.5 as information leading to identification of a new significant impact or a substantial increase in the severity of an impact) has been identified since publication of the Draft EIR and, consequently, there is no basis for the District's request that the Draft EIR be recirculated.

The City will continue to collaborate with the District on their facility needs and provide information on development and growth trends as well as ensuring school facilities are constructed to serve community needs to the extent allowed by State law, pursuant to the General Plan policies discussed above and in the Draft EIR under Section 4.13.3.

From: Kevin Thai <KThai@valleywater.org>
Sent: Tuesday, September 6, 2022 3:28 PM
To: Yau, Ellen <Ellen.Yau@mountainview.gov>
Subject: RE: DEIR for the City of Mountain View's Housing Element Update Project

CAUTION: EXTERNAL EMAIL - Ensure you trust this email before clicking on any links or attachments.

Hi Ellen,

Here is Valley Water's comment:

As noted in the Water Supply Assessment and draft EIR, there is the potential for water shortages in multiple dry years. Water conservation is an important component of the county's future water supply and the draft EIR lists a number of measures the City requires of new development; Valley Water appreciates Mountain View's commitment to water conservation. To meet future needs as allowed in the proposed Housing Element, additional water demand management and conservation measures will need to be implemented. Consistent with General Plan Policy INC 5.2: Citywide water conservation, Valley Water suggests that all new multifamily development be required to install separate submeters to each unit to encourage efficient water use. Studies have shown that adding submeters can reduce water use 15 to 30 percent.

A-4-1

Thanks,
Kevin

KEVIN THAI, CFM
ASSOCIATE ENGINEER - CIVIL
Community Projects Review Unit
Tel. (408) 630-3157 / CPRU Hotline: (408) 630-2650

Santa Clara Valley Water District is now known as:



Clean Water • Healthy Environment • Flood Protection

5750 Almaden Expressway, San Jose CA 95118
www.valleywater.org

Letter A-4 Response: Valley Water, September 6, 2022

- A-4-1 As discussed in Section 4.15, *Utilities and Service Systems*, of the Draft EIR, projects developed as a result of the HEU would be required to comply with Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The supplement to the 2019 CALGreen Code (effective July 1, 2021) requires that submeters be installed to measure water usage of individual rental dwelling units for multifamily and dwelling units in mixed-use residential/commercial buildings. The comment does not raise any new environmental issues that have not already been adequately described and evaluated in the Draft EIR, and no further response is required.



July 31, 2022

Ellen Yau, Senior Planner
City of Mountain View, Community Development Department
P.O. Box 7540
Mountain View, CA 94039

Re: Comments on Draft Environmental Impact Report for Mountain View’s Housing Element Update (SCH #2022020129)

Dear Senior Planner Yau,

Mountain View YIMBY, an organization with members who live, work, and/or do business in the city, is submitting these comments on the Draft Environmental Impact Report (DEIR) for Mountain View’s Housing Element Update. We hope our comments will help the Community Development Department craft a final EIR that supports a robust, fully compliant housing element, and that serves as the foundation for tiered, efficient environmental review of subsequent rezonings and housing approvals.

O-1-1

1. The EIR should analyze alternatives that would fully accommodate the city’s RHNA

Mountain View’s RHNA for the 2023-2030 planning period (11,135 units) translates into roughly 1,400 units/year, or 1.6x the current rate of production contemplated by the No Project Alternative (derived from 5th Cycle APRs).

O-1-2

The Housing Sites Inventory concludes that rezoning for merely 1,400 above-baseline units by 2030—units that would not be built if the regulatory status quo remained in place—will suffice. Yet as the [comment letter](#) from Mountain View YIMBY dated July 13 shows, a historically-grounded assessment of pipeline capacity suggests that the city should aim to rezone for about **4,900 above-baseline units by 2030**.

It is imperative that the final EIR analyze alternatives that provide additional rezoning scenarios. Without this, there is a real risk that the housing element update will go off the rails, as follows:

- **Train Wreck #1.** In this scenario, HCD would reject the pipeline/status-quo capacity analysis of the current housing element draft, and require the city to commit to a much more ambitious rezoning plan. The city would find itself unable to complete the requisite environmental review for a compliant plan prior to the deadline for housing element adoption. The city would thus fall out of compliance, resulting in loss of affordable housing funds and exposure to the [builder’s remedy](#).

- **Train Wreck #2.** In this scenario, HCD would provisionally accept the city’s pipeline/status-quo capacity analysis, but require the housing element to include a program for mid-cycle rezoning in case the pipeline’s yield falls short of projections. (HCD has imposed similar requirements on other cities that made sunny forecasts of ADU production.) Then, in this scenario, the pipeline yield does fall short, but the city is unable to pull off a timely mid-cycle rezoning because the housing element EIR didn’t lay the groundwork for it. HCD responds by decertifying the housing element, cutting off affordable housing funds and exposing the city to the builder’s remedy.

O-1-2

2. The EIR should acknowledge the legal effect of a housing element

The Housing Accountability Act generally prohibits cities from denying or “rendering infeasible” an affordable housing project, as defined, if the project “is proposed on a site that is identified as suitable ... for very low, low-, or moderate-income households in the jurisdiction’s housing element, and [is] consistent with the density specified in the housing element, even though it is inconsistent with both the jurisdiction’s zoning ordinance and general plan land use designation.” (Gov Code 65589.5(d)(5)(A) (emphasis added).)

O-1-3

The upshot is that while Mountain View would still have discretion after adopting its housing element to enact a different rezoning plan (with conforming housing-element amendments), the city’s *failure* to complete a legally adequate rezoning would not leave the zoning status quo in place. Rather, the city would be legally compelled to waive zoning and other forms of local land-use control that prevent the development of inventory sites at “post-rezoning” densities contemplated by the housing element.

The EIR should forthrightly acknowledge the legal effect of the housing element in order to fully disclose the consequences of the housing element’s adoption.

3. The analysis of the No Project Alternative should discuss environmental impacts of noncompliance with the Housing Element Law

Under 5.4.1 (Land Use and Planning Impacts of the No Project Alternative), the DEIR states “The land use and zoning designations currently in place would continue under the land use decisions and development parameters that currently exist in the City” (5-10). This is false. If the city does not adopt a substantially compliant housing element, it will forfeit authority to deny or “render infeasible” 20% low-income and 100% moderate-income projects on the basis of the city’s zoning code and general plan land-use designations. (Gov Code 65589.5(d)(5); Elmendorf, [“A Primer on California’s ‘Builder’s Remedy’ for Housing-Element Noncompliance”](#) (UCLA Lewis Center for Regional Policy Studies, April 2022)) There is also the possibility of a court order suspending the city’s authority to issue certain classes of building permits (Gov Code 65755(a)), and, eventually, a court-led rewriting of the city’s housing element (Gov Code 65585(l)).

O-1-4

Inherently, it is very hard to predict how these consequences of noncompliance would affect the amount, type and distribution of housing development in Mountain View. The EIR therefore needn’t address this topic in great detail. But if the EIR is to serve its function as an

informational document, it should provide the responsible decision makers with at least a rudimentary outline of the potential environmental effects of noncompliance.



O-1-4

4. The final EIR should discuss statewide and regional environmental benefits of higher growth alternatives

The DEIR asserts that the Reduced Sites Alternative is the “environmentally superior alternative” because “this lesser-intensity development would presumably emit fewer overall emissions” than the other alternatives (5-17). This statement about the environmental effects of curtailing development in Mountain View may be formally true within the artificial world that CEQA has created, but it bears little resemblance to the real world.

O-1-5

Increasing the size of Mountain View’s housing stock is an unequivocal environmental (and economic) win from national, statewide, and regional perspectives. The more people whose preference to live in Mountain View can be accommodated, the fewer people will end up living in places where they produce more CO2, displace wildlife, fill wetlands, bulldoze scenic vistas, disrupt the management of wildfire, and congest highways. CEQA may be blind to the environmental impacts of people whom Mountain View would fence out by restricting housing development, but CEQA’s elision does not launch them off Planet Earth. If there’s a feasible alternative that would allow them to live in Mountain View—an already urbanized area in a mild climate with many job opportunities—that alternative is almost surely the actual environmentally superior alternative.

It would be a welcome change for the final EIR to honor CEQA’s purpose of “inform[ing] the government and public about a proposed activity’s potential environmental impacts” ([California Building Industry Association v. Bay Area Air Quality Management District \(2015\)](#) 62 Cal. 4th 369, 382) by addressing the **substantial environmental benefits**, not just the local downsides, of higher growth alternatives.

Thank you for considering these comments.

Regards,

David Watson
On behalf of Mountain View YIMBY

Letter O-1 Response: Mountain View YIMBY, July 31, 2022

O-1-1 This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. This comment raises neither significant environmental issues nor specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088.

O-1-2 As noted on p. 5-1 of the Draft EIR, Chapter 5, *Alternatives to the Project*, is provided to “describe and evaluate alternatives to the Project” with the primary purpose of providing “decision-makers and the public with a qualitative review of alternatives to the Project that eliminate or substantially reduce any identified adverse environmental impacts while, at the same time, attaining most of the basic objectives of the Project.” Section 15126.6(a) states that “an EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.” Section 15126.6(f) describes a “rule of reason,” stating that an EIR “set forth only those alternatives necessary to permit a reasoned choice,” and “the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.” An EIR is not required to consider alternatives to a component of a project, but only alternatives to the project *as a whole*. (See State CEQA Guidelines Section 15126.6(a); *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 993.) Variations of the same alternative are also not required; “what is required is the production of information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned.” (*Residents Ad Hoc Stadium Comm. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 286; see also *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 355-56 [rejecting need to analyze every variation on the alternative continuum for housing project].)

Comments regarding the merits of the Project, including requested variations of housing and rezoning scenarios, do not raise a significant environmental issue or specific question about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.

O-1-3 This comment does not raise a significant *environmental* issue or specific questions about the analyses or information in the Draft EIR that would require response pursuant to State CEQA Guidelines Section 15088. The comment will be included as a part of the record and made available to the decision makers prior to a final decision on the proposed HEU.

O-1-4 Chapter 5, *Alternatives to the Project*, identifies the consequences of not adopting a housing element that is not compliant with State law. This alternative is analyzed consistent with Section 15126.6(e) of the CEQA Guidelines, which state that the No Project Alternative must include the assumption that conditions at the time the NOP of an EIR was circulated for public review would not be changed because the Project would not be implemented, as well as the events or actions that would reasonably be expected to occur in the foreseeable future if the Project were not approved.

The Draft EIR described that the No Project Alternative would also introduce a new significant and unavoidable impact related to land use and planning. The No Project Alternative would not meet any of the objectives of the HEU, nor is it legally feasible to implement. The No Project Alternative would not provide housing to fulfill the requirements of State law or meet the City's RHNA requirements, which result in a significant and unavoidable land use and planning impact, as compared to the less-than-significant impacts associated with the proposed HEU and the Reduced Sites Alternative (Draft EIR pp. 5-18 – 5-19).

Additionally, it is impossible to currently predict whether any applications for development under the "Builders' Remedy" would be submitted, where such development would be proposed, how many applications there would be, and the development potential associated with any proposal. Therefore, the No Project Alternative need not analyze such speculative outcomes.

O-1-5 See Response to Comment O-1-2 regarding the requirements and purpose of the analysis of alternatives in the Draft EIR. As stated in CEQA Guidelines Section 15126.6, the principal purpose of an EIR's analysis of alternatives is to describe and consider a range of reasonable alternatives to the project that would avoid or substantially lessen any of the identified significant effects of the project. Alternatives with higher growth assumptions would be unlikely to avoid or substantially lessen any of the identified significant effects of the Project on the environment, and were therefore not considered.



September 5, 2022

Ellen Yau
Community Development Department, First Floor
500 Castro Street, PO Box 7540, Mountain View, CA 94039-7540
Ellen.Yau@mountainview.gov

Re: City of Mountain View Housing Element Update Draft EIR, SCH# 2022020129

Dear Ms. Yau

The Santa Clara Valley Audubon Society (SCVAS) is one of the largest National Audubon Society chapters in California. Our mission is to promote the enjoyment, understanding, and protection of birds and other wildlife by engaging people of all ages in birding, education, and conservation. We appreciate the opportunity to comment on the Draft Environmental Impact report (DEIR) for the City of Mountain View Housing Element Update. GreenspacesMV is a community group in Mountain View, CA striving for healthy communities thriving with urban tree canopy, nature, and native biodiversity.

Our organizations' interest in this project focuses on potential impacts to biological resources. We are especially interested in North Bayshore, where (based on the 2017 North Bayshore Precise Plan) the Housing Element Update allows for up to 9,850 new multi-family residential units and 3.6 million square feet of office and commercial development.

We believe that the North Bayshore Precise Plan requirements and development standards should be updated to reflect new scientific knowledge regarding lighting. The near-extirpation condition of burrowing owl populations in our region is also of concern. North Bayshore and the adjacent Shoreline Parks are critically important to many species of birds, and of great importance to the public. Birdwatchers often document the presence and abundance of birds on eBird¹.

¹ Launched in 2002, eBird is a citizen science-based, national database administered by the Cornell Lab of Ornithology and the National Audubon Society. eBird provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. Reports to eBird help deepen our understanding of local, regional and international trends in bird populations and bird migration. For example:

- Charleston Retention Basin: <http://ebird.org/ebird/hotspot/L284760>
- Charleston Slough/Coast Casey Forebay: <http://ebird.org/ebird/hotspot/L730351>
- Shoreline Park: <http://ebird.org/ebird/hotspot/L271482>
- Shoreline Lake: <http://ebird.org/ebird/hotspot/L594012>

We submit the following comments:

1. Artificial Light at Night

Since the adoption of the North Bayshore Precise Plan, new scientific studies have revealed the pervasive and harmful impacts of most available LED light fixtures on ecosystems and on all living organisms: plants, insects, mammals, birds and more. This is because life on Earth evolved with light as a primary cue for biological function and ecological webs. The length of daylight hours, and changes in the length of daylight hours, both control life cycles and behavior in all living organisms. This pervasive influence of light is augmented by the attraction or aversion responses to light in many animals, where light can attract them to harmful situations or deprives them from habitats and blocks habitat connectivity, increasing fragmentation. Because of the inherent control of hormonal pathways by light, exposure to outdoor light at night also exacerbates illness (cancer, obesity, mental health) in humans².

O-2-2

The International Dark Sky Association State of the Science 2022 report³ and the attached 2021 compilation by the Sierra Club both include many references to scientific studies published since 2020 that highlight the injury to ecosystems, species, and human health associated with bright lighting, especially in the blue light of the spectrum. Scientists now recommend that lighting should be always kept to the minimum brightness and a Correlated Color Temperature of no more than 2400 Kelvin. The Housing Element should include new standards that reflect these recommendations.

The adopted North Bayshore Precise Plan should be amended so that, at least in North Bayshore, the Housing Element can 1) eliminate minimum lighting requirements; 2) require lighting to be of minimal feasible brightness, and trespass of no more than 0.1 foot candle; 3) require lighting fixtures of 2400 Kelvin or less for all outdoor lighting. In addition, all outdoor lighting fixtures should be capable of accepting 7-pin controls that can enable use of dimmers, timers, motion sensors, and networking. Lighting should be actively controlled through means such as dimmers and motion-sensing switches so as to reduce illuminances or extinguish lighting altogether when the light is not needed.

2. Canopy, Trees and the Urban Forest

Trees and the urban forest provide multiple environmental benefits to the city, including reducing heat-island effects, absorbing CO₂ and harmful air-polluting particulates, providing shade and beauty, and contributing positively to health and cognition⁴. The City of Mountain

O-2-3

² For example, Outdoor light at night, overweight, and obesity in school-aged children and adolescents, <https://www.sciencedirect.com/science/article/abs/pii/S0269749122005206>

³ <https://www.darksky.org/wp-content/uploads/2022/06/IDA-State-of-the-Science-2022-EN.pdf>

⁴ Urban trees and human health (a scoping review): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7345658/>

View, and the DEIR, allow development projects to pay fees or donate trees when there is no suitable on-site location for replacement trees. The overall loss of trees and canopy to housing development, however, has been highly noticeable and controversial in Mountain View.

O-2-3

Please analyze a realistic forecast of the impact of the project on the city's urban canopy, including the identification of places where replacement trees can be planted as mitigation for the impact. If the cumulative loss of trees and canopy cannot be adequately replaced (due to a shortage of appropriate planting sites), or the canopy cannot be replaced in a reasonable period of time, then the loss of trees and canopy should be considered a significant, unavoidable biological impact.

3. Burrowing Owls

Shoreline Park's Burrowing Owl breeding population has declined significantly since the adoption of the North Bayshore Precise Plan. In 2017, the focus was still on conservation of the population, whereas the current focus is on recovery of the population. Population decline is partially attributed to encroachment and disturbance caused by humans (and often, their dogs) that use Shoreline grasslands for recreation. Disruptive behaviors occur despite signage and day-time ranger patrol. The only mitigation that is currently successful is fencing.

O-2-4

With the increase in population expected in North Bayshore, the encroachment can be expected during the day and at night. We ask for a mitigation measure that will install fencing to extend existing fences and allow the park to close and become inaccessible after closing hours, see Figure 1 for recommended fencing below..

Effects of nature on cognitive functioning, emotional well-being, and other dimensions of mental health:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6656547/>

Effects of trees on academic success: <https://aslathedirt.files.wordpress.com/2016/01/li-sullivan.pdf>

Nature conservancy benefits of urban trees:

https://www.nature.org/content/dam/tnc/nature/en/documents/Public_Health_Benefits_Urban_Trees_FINAL.pdf

Urban forests and climate change (discusses benefits of urban forests to physical and mental health):

<https://www.fs.usda.gov/ccrc/topics/urban-forests> and

Effects of vegetation on reducing frustration levels for drivers:

<https://journals.sagepub.com/doi/abs/10.1177/0013916503256267>

Figure 1: recommended fencing for Shoreline park (existing fencing in blue, first priority for additional fencing in red, second priority for additional fencing in yellow)



O-2-4

Thank you for the opportunity to provide comments,

Shani Kleinhaus
Environmental Advocate
Santa Clara Valley Audubon Society
advocate@scvas.org

Bruce England
GreenSpacesMV
greenspacesmv.org

Resources and References that helped inform Sierra Club's Light Pollution Policy Update

(Last updated 3/7/2021)

Over 70 resources and references (including websites, articles, publications, and reports) were reviewed during Sierra Club's March 2021 update to its light pollution national policy. The list is only provided to document resources used during policy development. Inclusion of any given resource in this list should *not* be construed as an endorsement by Sierra Club. The main resources consulted are listed below, organized by a relevant category. Several resources cover multiple issues, but each is only listed once.

Sierra Club Advocacy

Sierra Club AddUp Petition to City Mayors: Protect the Night Against Light Pollution (started in Feb 2018)

<https://addup.sierraclub.org/campaigns/protect-the-night>

Sierra Club Articles

On the Hunt for Stars: In Search of a Truly Dark Night Sky. Heather Smith, Feb 27, 2018. SIERRA magazine, March/April 2018 edition. <https://www.sierraclub.org/sierra/2018-2-march-april/feature/hunt-for-stars-dark-skies-preserves-and-parks>

Reclaiming the Night. SIERRA magazine. Katie O'Reilly. <https://www.sierraclub.org/sierra/slideshow/reclaiming-night>

General Educational Resources

National Park Service Night Skies, www.nps.gov/subjects/night skies

Light pollution - a global discussion. Schulte-Römer, N., Dannemann, E., Meier, J. (2018): Helmholtz Centre for Environmental Research - UFZ, Leipzig, 248 pp.

<http://www.lightpollutiondiscussion.net>

The Right to Dark Skies, 2016, United Nations Educational, Scientific and Cultural Organization (UNESCO Mexico)

<https://unesdoc.unesco.org/ark:/48223/pf0000246131>

Our nights are getting brighter, and Earth is paying the price, by Nadia Drake, National Geographic, published April 3, 2019

<https://www.nationalgeographic.com/science/2019/04/nights-are-getting-brighter-earth-paying-the-price-light-pollution-dark-skies/>

Treat artificial light like other forms of pollution, say scientists. Jonathan Watts, The Guardian. Nov 2, 2020.

<https://www.theguardian.com/environment/2020/nov/02/treat-artificial-light-form-pollution-environment>

Excerpt: "What stands out is how pervasive the effects are. The effects were found everywhere – microbes, invertebrates, animals and plants," said the lead author, Kevin Gaston, a professor at the university's Environment and Sustainability Institute. "We need to start thinking about lighting in the way we think of other big systemic pressures like climate change."

Light pollution – extent, effects and approaches. TAB-Fokus no. 25, Jun 2020, Office of Technology Assessment at the German Bundestag. Christoph Schröter-Schlaack, et al.

<http://www.tab-beim-bundestag.de/en/news/20200828.html>

Summary: In addition to the intended effects, the increasing use of artificial outdoor lighting also entails a number of undesirable side effects referred to as light pollution. Artificial lighting can disturb the circadian rhythms of humans and animals, which are controlled by the change of day and night, and is suspected of being involved in the development of various diseases. Moreover, the increasing illumination of the night influences the natural behaviour of animals. Besides habitat changes, the consequences are ranging from changes in hunting or reproductive behaviour to the deadly attraction effect of light sources, e. g. for insects. However, the longterm consequences of these changes for entire populations, communities or landscapes are still poorly understood. Options for reducing light pollution exist both technologically and in terms of regulation and approval of lighting installations.

Light Pollution Is Taking Away Our Night Skies. Here's Why That Matters. 11/13/2019. HuffPost. By Kyla Mandel

https://www.huffpost.com/entry/city-light-pollution-night-sky-star-protection_n_5dc9d1fee4b00927b2381233

Some cities and states are trying to protect our night sky "for the health and wellbeing for all living things."

Light Pollution Trends

Artificially lit surface of Earth at night increasing in radiance and extent, by Christopher C. M. Kyba, Theres Kuester, Alejandro Sánchez de Miguel, Kimberly Baugh, Andreas Jechow, Franz Hölker, Jonathan Bennie, Christopher D. Elvidge, Kevin J. Gaston, and Luis Guanter. *Science Advances* 22 Nov 2017: Vol. 3, no. 11, e1701528, DOI: 10.1126/sciadv.1701528
<http://advances.sciencemag.org/content/3/11/e1701528>

Abstract: A central aim of the “lighting revolution” (the transition to solid-state lighting technology) is decreased energy consumption. This could be undermined by a rebound effect of increased use in response to lowered cost of light. We use the first-ever calibrated satellite radiometer designed for night lights to show that from 2012 to 2016, Earth’s artificially lit outdoor area grew by 2.2% per year, with a total radiance growth of 1.8% per year. Continuously lit areas brightened at a rate of 2.2% per year. Large differences in national growth rates were observed, with lighting remaining stable or decreasing in only a few countries. These data are not consistent with global scale energy reductions but rather indicate increased light pollution, with corresponding negative consequences for flora, fauna, and human well-being.

The new world atlas of artificial night sky brightness. Falchi, F., Cinzano, P., Duriscoe, D., Kyba, C.C.M., Elvidge, C.D., Baugh, K., Portnow, B.A., Rybnikova, N.A., & Furgoni, R. (2016). *Science Advances*, 2:e1600377.
<https://advances.sciencemag.org/content/2/6/e1600377>

Abstract: Artificial lights raise night sky luminance, creating the most visible effect of light pollution—artificial skyglow. Despite the increasing interest among scientists in fields such as ecology, astronomy, health care, and land-use planning, light pollution lacks a current quantification of its magnitude on a global scale. To overcome this, we present the world atlas of artificial sky luminance, computed with our light pollution propagation software using new high-resolution satellite data and new precision sky brightness measurements. This atlas shows that more than 80% of the world and more than 99% of the U.S. and European populations live under light-polluted skies. The Milky Way is hidden from more than one-third of humanity, including 60% of Europeans and nearly 80% of North Americans. Moreover, 23% of the world’s land surfaces between 75°N and 60°S, 88% of Europe, and almost half of the United States experience light-polluted nights.

Light pollution in USA and Europe: The good, the bad and the ugly. F. Falchi, R. Furgoni, T.A. Gallaway, N.A. Rybnikova, B.A. Portnov, K. Baugh, P. Cinzano, C.D. Elvidge, *Elsevier Journal of Environmental Management*, Volume 248, 2019, 109227, 15 October 2019
<http://www.sciencedirect.com/science/article/pii/S0301479719309296>

Abstract: Light pollution is a worldwide problem that has a range of adverse effects on human health and natural ecosystems. Using data from the New World Atlas of Artificial Night Sky Brightness, VIIRS-recorded radiance and Gross Domestic Product (GDP) data, we compared light pollution levels, and the light flux to the population size and GDP at the State and County levels in the USA and at Regional (NUTS2) and Province (NUTS3) levels in Europe. We found 6800-fold differences between the most and least polluted regions in Europe, 120-fold differences in their light flux per capita, and 267-fold differences in flux per GDP unit. Yet, we found even greater differences between US counties: 200,000-fold differences in sky pollution, 16,000-fold differences in light flux per capita, and 40,000-fold differences in light flux per GDP unit. These findings may inform policy-makers, helping to reduce energy waste and adverse environmental, cultural and health consequences associated with light pollution.

Global Trends in Exposure to Light Pollution in Natural Terrestrial Ecosystems. Bennie, J.; Duffy, J.P.; Davies, T.W.; Correa-Cano, M.E.; Gaston, K.J. *Remote Sens.* 2015, 7, 2715-2730.
<https://www.mdpi.com/2072-4292/7/3/2715>

Abstract: The rapid growth in electric light usage across the globe has led to increasing presence of artificial light in natural and semi-natural ecosystems at night. This occurs both due to direct illumination and skyglow - scattered light in the atmosphere. There is increasing concern about the effects of artificial light on biological processes, biodiversity and the functioning of ecosystems. We combine intercalibrated Defense Meteorological Satellite Program’s Operational Linescan System (DMSP/OLS) images of stable night-time lights for the period 1992 to 2012 with a remotely sensed landcover product (GLC2000) to assess recent changes in exposure to artificial light at night in 43 global ecosystem types. We find that Mediterranean-climate ecosystems have experienced the greatest increases in exposure, followed by temperate ecosystems. Boreal, Arctic and montane systems experienced the lowest increases. In tropical and subtropical regions, the greatest increases are in mangroves and subtropical needleleaf and mixed forests, and in arid regions increases are mainly in forest and agricultural areas. The global ecosystems experiencing the greatest increase in exposure to artificial light are already localized and fragmented, and often of particular conservation importance due to high levels of diversity, endemism and rarity. Night time remote sensing can play a key role in identifying the extent to which natural ecosystems are exposed to light pollution.

Direct measurement of the contribution of street lighting to satellite observations of nighttime light emissions from urban areas. Kyba, C, et al. *Lighting Research & Technology*. October 2020.
<https://doi.org/10.1177/1477153520958463>

Abstract: Nighttime light emissions are increasing in most countries worldwide, but which types of lighting are responsible for the increase remains unknown. Also unknown is what fraction of outdoor light emissions and associated energy use are due to

public light sources (i.e. streetlights) or various types of private light sources (e.g. advertising). Here we show that it is possible to measure the contribution of street lighting to nighttime satellite imagery using ‘smart city’ lighting infrastructure. The city of Tucson, USA, intentionally altered its streetlight output over 10 days, and we examined the change in emissions observed by satellite. We find that streetlights operated by the city are responsible for only 13% of the total radiance (in the 500–900 nm band) observed from Tucson from space after midnight (95% confidence interval 10–16%). If Tucson did not dim their streetlights after midnight, the contribution would be 18% (95% confidence interval 15–23%). When streetlights operated by other actors are included, the best estimates rise to 16% and 21%, respectively. Existing energy and lighting policy related to the sustainability of outdoor light use has mainly focused on street lighting. These results suggest an urgent need for consideration of other types of light sources in outdoor lighting policy.

Anthropogenic Light Disrupts Natural Light Cycles in Critical Conservation Areas, Seymoure, B, et al. (August 19, 2019).

<https://ssrn.com/abstract=3439670>

Abstract: Anthropogenic lighting drastically alters nocturnal environments, threatening a wide range of species by disrupting light regimes that regulate fundamental biological processes such as reproduction, foraging, and predator defense. We translate satellite measures of anthropogenic light radiating from the earth to a biologically relevant measurement – the amount of light scattered back to the earth (horizontal illuminance). Anthropogenic light exceeding the natural level produced by stars, galactic light, and airglow on a clear moonless night (i.e., new moon conditions) affects 22.9% of the Earth’s terrestrial surface, as well as 51.0% of Key Biodiversity Area units, 77.1% of Global Protected Area units, and approximately 20% of the most biodiverse areas for mammals, birds, and amphibians. Thus, due to anthropogenic sources, these environments experience at least double the levels of natural illuminance during half of the night hours in a year. To facilitate biological interpretation of these levels of anthropogenic illuminance observed globally, we undertook a systematic literature review of animal responses to changing nocturnal light levels. Known biological effects from the current anthropogenic illuminance levels range from behavioral and physiological alterations to increased mortality, which have been documented in 117 species from 23 orders and 8 classes. These findings provide a biological perspective on global light pollution, and they identify regions where reductions in anthropogenic illuminance would yield the greatest benefits for conserving biodiversity.

Effects of the COVID-19 Lockdown on Urban Light Emissions: Ground and Satellite Comparison. Bustamante-Calabria, M, Sánchez de Miguel, A, et al. Remote Sensing. Jan 2021, Vol 13, Issue 2, 258.

<https://www.mdpi.com/2072-4292/13/2/258>

Abstract Excerpt: ‘Lockdown’ periods in response to COVID-19 have provided a unique opportunity to study the impacts of economic activity on environmental pollution (e.g., NO₂, aerosols, noise, light)... Here, to analyze the effect of lockdown on urban light emissions, we use ground and satellite data for Granada, Spain, during the COVID-19 induced confinement of the city’s population from 14 March until 31 May 2020. We find a clear decrease in light pollution due both to a decrease in light emissions from the city and to a decrease in anthropogenic aerosol content in the atmosphere which resulted in less light being scattered. A clear correlation between the abundance of PM₁₀ particles and sky brightness is observed, such that the more polluted the atmosphere the brighter the urban night sky.

Environmental and Social Justice

Light pollution inequities in the continental United States: A distributive environmental justice analysis. Nadybal S.M., Collins T.W., Grineski S.E.. Environmental Research, Vol 189, 2020, 109959.

<http://www.sciencedirect.com/science/article/pii/S0013935120308549>

Abstract: Excessive exposure to ambient light at night is a well-documented hazard to human health, yet analysts have not examined it from an environmental justice (EJ) perspective. We conducted the first EJ study of exposure to light pollution by testing for socially disparate patterns across the continental United States (US)... We found evidence of disparities in exposures to light pollution based on racial/ethnic minority and low-to-mid socioeconomic statuses. Americans of Asian, Hispanic or Black race/ethnicity had population-weighted mean exposures to light pollution in their neighborhoods that were approximately two times that of White Americans... neighborhoods composed of higher proportions of Blacks, Hispanics, Asians, or renter-occupants experienced greater exposures to ambient light at night. Stratified analyses indicated that those patterns of inequity did not substantially vary based on urban-rural context. Findings have implications for understanding environmental influences on health disparities, raise concerns about the potential for a multiple environmental jeopardy situation, and highlight the need for policy actions to address light pollution.

An incandescent truth: Disparities in energy-efficient lighting availability and prices in an urban U.S. county. Reames, Tony G., Michael A. Reiner, and M. Ben Stacey. (2018) Applied Energy 218:95-103.

<https://www.sciencedirect.com/science/article/abs/pii/S0306261918302769>

Abstract Excerpt: In the U.S. lighting represents about 9% of the average household's primary energy consumption and 20% of the average household's energy bill. Lighting in U.S. homes is in a state of transition with steady growth in the adoption of more energy-efficient lighting technology, such as, compact florescent lamps (CFL) and light-emitting diodes (LEDs). However, the adoption of energy-efficient lighting is not equitably distributed across socioeconomic groups, with poorer households less likely to adopt than higher-income households... We found that (1) energy-efficient bulbs were less available in high-poverty areas and

smaller stores; (2) energy-efficient bulbs were more expensive in high-poverty areas and smaller stores; (3) upgrade costs from incandescent and halogen lamps (IHLs) to CFLs or LEDs were higher in high poverty areas; and (4) both poverty and store type were significant predictors of LED availability, while store type was the most significant predictor of LED price variability. We suggest several ways that the development and implementation of energy efficiency policies and programs may consider these disparities that affect access and affordability, in order to achieve a more just energy-efficient transition.

Up in smoke: Characterizing the population exposed to flaring from unconventional oil and gas development in the contiguous US. Cushing Lara J, et al. Feb 2021. Environmental Research Letters. Vol. 16, No 3.

<https://iopscience.iop.org/article/10.1088/1748-9326/abd3d4>

Abstract Excerpt: The disposal of waste gas via intentional combustion (flaring) from unconventional oil and gas (UOG) development has also been on the rise, and may expose nearby residents to toxic air pollutants, light pollution and noise... We found that three basins accounted for over 83% of all UOG flaring activity in the contiguous US over the 8 year study period. We estimated that over half a million people in these basins reside within 5 km of a flare, and 39% of them lived near more than 100 nightly flares. Black, indigenous, and people of color were disproportionately exposed to flaring.

Light Pollution in San Antonio, TX: An Environmental Justice Issue. Alvarez, V, et al. May 2020. Environmental Studies Student Works. Trinity University.

https://digitalcommons.trinity.edu/env_studocs/2

Abstract Excerpt: the environmental justice movement often overlooks the issue of light pollution, even though light pollution is higher in urban low-income areas. There is a lack of studies examining how light pollution varies between communities on a regional, state, or municipal scale... The mid-income neighborhoods had the greatest median and maximum light pollution levels, while high-income neighborhoods had the lowest median illuminance. These results indicate that mid-income neighborhoods are subject to the greatest amount of light pollution by area and intensity.

Ecological, Wildlife and Human Impacts

Ecological light pollution. Longcore, T. and Rich, C. (2004), *Frontiers in Ecology and the Environment*, 2: 191-198.

<https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2>

Abstract: Ecologists have long studied the critical role of natural light in regulating species interactions, but, with limited exceptions, have not investigated the consequences of artificial night lighting. In the past century, the extent and intensity of artificial night lighting has increased such that it has substantial effects on the biology and ecology of species in the wild. We distinguish “astronomical light pollution”, which obscures the view of the night sky, from “ecological light pollution”, which alters natural light regimes in terrestrial and aquatic ecosystems. Some of the catastrophic consequences of light for certain taxonomic groups are well known, such as the deaths of migratory birds around tall lighted structures, and those of hatchling sea turtles disoriented by lights on their natal beaches. The more subtle influences of artificial night lighting on the behavior and community ecology of species are less well recognized, and constitute a new focus for research in ecology and a pressing conservation challenge.

Ecological consequences of artificial night lighting. Rich, C. and T. Longcore. (eds.). 2006. Island Press, Washington, D.C.

<https://www.urbanwildlands.org/ecanlbook.html>

The first book to consider the environmental effects of the intentional illumination of the night. It brings together leading scientists from around the world to review the state of knowledge on the subject and to describe specific effects that have been observed across a full range of taxonomic groups, including mammals, birds, reptiles and amphibians, fishes, invertebrates, and plants... provides a scientific basis to begin addressing the challenge of conserving the nighttime environment. It cogently demonstrates the vital importance of this until-now neglected topic and is an essential new work for conservation planners, researchers, and anyone concerned with human impacts on the natural world.

Light Pollution Is a Driver of Insect Declines, by Owens, A, et al. (April 26, 2019)

<https://ssrn.com/abstract=3378835>

Abstract: Insects around the world are rapidly declining. Concerns over what this loss means for food security and ecological communities have compelled a growing number of researchers to search for the key drivers behind the decline. Habitat loss, pesticide use, invasive species, and climate change all have likely played a role, but we posit here that artificial light at night (ALAN) is another important — but often overlooked — bringer of the insect apocalypse. We first discuss the history and extent of ALAN, and then present evidence that ALAN has led to insect declines through its interference with the development, movement, foraging, and reproductive success of diverse insect species, as well as its positive effect on insectivore predation. We conclude with a discussion of how artificial lights can be tuned to reduce their impacts on vulnerable populations. ALAN is unique among anthropogenic habitat disturbances in that it is fairly easy to ameliorate, and leaves behind no residual effects. Greater recognition of the ways in which ALAN impacts insects can help conservationists reduce or eliminate one of the major drivers of insect declines.

A meta-analysis of biological impacts of artificial light at night. Nature Ecology & Evolution (2020), Dirk Sanders, Enric Frago, Rachel Kehoe, Christophe Patterson & Kevin J. Gaston

<https://doi.org/10.1038/s41559-020-01322-x>

<https://datadryad.org/stash/dataset/doi:10.5061/dryad.wpzgmsbjn>

Abstract: Natural light cycles are being eroded over large areas of the globe by the direct emissions and sky brightening that result from sources of artificial night-time light. This is predicted to affect wild organisms, particularly because of the central role that light regimes play in determining the timing of biological activity. Although many empirical studies have reported such effects, these have focused on particular species or local communities and have thus been unable to provide a general evaluation of the overall frequency and strength of these impacts. Using a new database of published studies, we show that exposure to artificial light at night induces strong responses for physiological measures, daily activity patterns and life history traits. We found particularly strong responses with regards to hormone levels, the onset of daily activity in diurnal species and life history traits, such as the number of offspring, predation, cognition and seafinding (in turtles). So far, few studies have focused on the impact of artificial light at night on ecosystem functions. The breadth and often strength of biological impacts we reveal highlight the need for outdoor artificial night-time lighting to be limited to the places and forms—such as timing, intensity and spectrum—where it is genuinely required by the people using it to minimize ecological impacts.

Longer photoperiods through range shifts and artificial light lead to a destabilizing increase in host–parasitoid interaction strength. Kehoe, R, Sanders, D, Cruse, D, et al. Journal of Animal Ecology. 2020; 89: 2508–2516.

<https://doi.org/10.1111/1365-2656.13328>

Excerpts: Many organisms are experiencing changing daily light regimes due to latitudinal range shifts driven by climate change and increased artificial light at night (ALAN). Activity patterns are often driven by light cycles, which will have important consequences for species interactions... Here we demonstrate that ALAN impact interacts with daylength and temperature by changing the interaction strength between a common day-active consumer species and its host in a predictable way. Our results further suggest that range expansion or ALAN-induced changes in light regimes experienced by insects and their natural enemies will result in unstable dynamics beyond key tipping points in daylength... Finally, the strong response of a diurnal host–parasitoid system reported here also emphasizes the importance of focussing on the impact of ALAN not just on nocturnal species but also on those that are chiefly diurnal, on which the effects of ALAN may be just as profound, if not as intuitive.

Artificial nightlight alters the predator–prey dynamics of an apex carnivore. Ditmer, MA, et al. (2020). Ecography

<https://doi.org/10.1111/ecog.05251>

Abstract Excerpts: Our results indicate that deer used the anthropogenic environments to access forage and were more active at night than their wildland conspecifics. Despite higher nightlight levels, cougars killed deer at the wildland–urban interface, but hunted them in the relatively darkest locations. Light had the greatest effect of all covariates on where cougars killed deer at the wildland–urban interface. Both species exhibited functional responses to light pollution at fine scales; individual cougars and deer with less light exposure increasingly avoided illuminated areas when exposed to greater radiance, whereas deer living in the wildland–urban interface selected elevated light levels. We conclude that integrating estimates of light pollution into ecological studies provides crucial insights into how the dynamic human footprint can alter animal behavior and ecosystem function across spatial scales.

Coral Gametogenesis Collapse under Artificial Light Pollution. Ayalon et al. Current Biology. Nov 2020

<https://doi.org/10.1016/j.cub.2020.10.039>

Excerpts: Marine organisms, including coral reefs in particular, rely on the natural light cycles of sunlight and moonlight to regulate various physiological, biological, and behavioral processes. Here, we demonstrate that light pollution caused delayed gametogenesis and unsynchronized gamete release in two coral species, *Acropora millepora* and *Acropora digitifera*, from the Indo-Pacific Ocean... With the global transition toward LED lighting, which tends to have higher emissions in the blue spectrum, more coral reefs could be affected by artificial light, as blue light penetrates deeper into the water column. This spectral shift is expected to be amplified by the current rapid population growth in coastal regions... Our experimental results are corroborated by *in situ* observations, which have shown disruption of gametogenesis and loss of spawning synchrony in corals occurring at sites that are heavily polluted by artificial lights. These results demonstrate that artificial light must be considered in conservation plans for coral reefs near areas of human activity.

Sensory pollutants alter bird phenology and fitness across a continent. Senzaki, M., Barber, J.R., Phillips, J.N. et al. Nature 587, 605–609 (2020)

<https://doi.org/10.1038/s41586-020-2903-7>

Abstract: Expansion of anthropogenic noise and night lighting across our planet is of increasing conservation concern. Despite growing knowledge of physiological and behavioural responses to these stimuli from single-species and local-scale studies, whether these pollutants affect fitness is less clear, as is how and why species vary in their sensitivity to these anthropic stressors. Here we leverage a large citizen science dataset paired with high-resolution noise and light data from across the contiguous United States to assess how these stimuli affect reproductive success in 142 bird species. We find responses to both sensory pollutants linked to the functional traits and habitat affiliations of species. For example, overall nest success was negatively correlated with noise among birds in closed environments. Species-specific changes in reproductive timing and hatching success

in response to noise exposure were explained by vocalization frequency, nesting location and diet. Additionally, increased light-gathering ability of species' eyes was associated with stronger advancements in reproductive timing in response to light exposure, potentially creating phenological mismatches. Unexpectedly, better light-gathering ability was linked to reduced clutch failure and increased overall nest success in response to light exposure, raising important questions about how responses to sensory pollutants counteract or exacerbate responses to other aspects of global change, such as climate warming. These findings demonstrate that anthropogenic noise and light can substantially affect breeding bird phenology and fitness, and underscore the need to consider sensory pollutants alongside traditional dimensions of the environment that typically inform biodiversity conservation.

Bright lights in the big cities: migratory birds' exposure to artificial light. Horton, KG., Nilsson, C., et al, 2019. *Frontiers in Ecology and the Environment*, April 2019.

<https://doi.org/10.1002/FEE.2029>

<https://www.youtube.com/watch?v=gXSN2GmI8M>

Abstract: Many species of migratory birds have evolved the ability to migrate at night, and the recent and rapid expansion of artificial light at night has markedly altered the nighttime sky through which they travel. Migrating birds regularly pass through heavily illuminated landscapes, and bright lights affect avian orientation. But risks to migrating birds from artificial light are not spatially or temporally uniform, representing a challenge for mitigating potential hazards and developing action plans to catalog risks at continental scales. We leveraged over two decades of remote-sensing data collected by weather surveillance radar and satellite-based sensors to identify locations and times of year when the highest numbers of migrating birds are exposed to light pollution in the contiguous US. Our continental-scale quantification of light exposure provides a novel opportunity for dynamic and targeted conservation strategies to address the hazards posed by light pollution to nocturnally migrating birds.

High-intensity urban light installation dramatically alters nocturnal bird migration. Van Doren BM, Horton KG, et al. *Proceedings of the National Academy of Sciences*, Oct 2017, 114 (42) 11175-11180

<https://www.pnas.org/content/114/42/11175>

Abstract Excerpt: Billions of nocturnally migrating birds move through increasingly photopolluted skies, relying on cues for navigation and orientation that artificial light at night (ALAN) can impair... We studied effects of ALAN on migrating birds by monitoring the beams of the National September 11 Memorial & Museum's "Tribute in Light" in New York, quantifying behavioral responses with radar and acoustic sensors and modeling disorientation and attraction with simulations... When the installation was illuminated, birds aggregated in high densities, decreased flight speeds, followed circular flight paths, and vocalized frequently... However, behavioral disruptions disappeared when lights were extinguished, suggesting that selective removal of light during nights with substantial bird migration is a viable strategy for minimizing potentially fatal interactions among ALAN, structmelures, and birds. Our results also highlight the value of additional studies describing behavioral patterns of nocturnally migrating birds in powerful lights in urban areas as well as conservation implications for such lighting installations.

The ecological impacts of nighttime light pollution: a mechanistic appraisal. Gaston, K. J., Bennie, J., Davies, T. W. and Hopkins, J., *Biological Reviews*, Vol 88, Issue 4, 2013, Cambridge Philosophical Society

<https://onlinelibrary.wiley.com/doi/full/10.1111/brv.12036>

Abstract: The ecological impacts of nighttime light pollution have been a longstanding source of concern, accentuated by realized and projected growth in electrical lighting. As human communities and lighting technologies develop, artificial light increasingly modifies natural light regimes by encroaching on dark refuges in space, in time, and across wavelengths. A wide variety of ecological implications of artificial light have been identified. However, the primary research to date is largely focused on the disruptive influence of nighttime light on higher vertebrates, and while comprehensive reviews have been compiled along taxonomic lines and within specific research domains, the subject is in need of synthesis within a common mechanistic framework. Here we propose such a framework that focuses on the cross-factoring of the ways in which artificial lighting alters natural light regimes (spatially, temporally, and spectrally), and the ways in which light influences biological systems, particularly the distinction between light as a resource and light as an information source. We review the evidence for each of the combinations of this cross-factoring. As artificial lighting alters natural patterns of light in space, time and across wavelengths, natural patterns of resource use and information flows may be disrupted, with downstream effects to the structure and function of ecosystems. This review highlights: (i) the potential influence of nighttime lighting at all levels of biological organisation (from cell to ecosystem); (ii) the significant impact that even low levels of nighttime light pollution can have; and (iii) the existence of major research gaps, particularly in terms of the impacts of light at population and ecosystem levels, identification of intensity thresholds, and the spatial extent of impacts in the vicinity of artificial lights.

Light Pollution, Circadian Photoreception, and Melatonin in Vertebrates. Grubisic M, Haim A, Bhusal P, Dominoni DM, Gabriel KMA, Jechow A, Kupprat F, Lerner A, Marchant P, Riley W, Stebelova K, van Grunsven RHA, Zeman M, Zubidat AE, Hölker F. *Sustainability*. 2019; 11(22):6400.

<https://www.mdpi.com/2071-1050/11/22/6400>

Abstract: Artificial light at night (ALAN) is increasing exponentially worldwide, accelerated by the transition to new efficient lighting technologies. However, ALAN and resulting light pollution can cause unintended physiological consequences. In vertebrates, production of melatonin—the “hormone of darkness” and a key player in circadian regulation—can be suppressed by

ALAN. In this paper, we provide an overview of research on melatonin and ALAN in vertebrates. We discuss how ALAN disrupts natural photic environments, its effect on melatonin and circadian rhythms, and different photoreceptor systems across vertebrate taxa. We then present the results of a systematic review in which we identified studies on melatonin under typical light-polluted conditions in fishes, amphibians, reptiles, birds, and mammals, including humans. Melatonin is suppressed by extremely low light intensities in many vertebrates, ranging from 0.01–0.03 lx for fishes and rodents to 6 lx for sensitive humans. Even lower, wavelength-dependent intensities are implied by some studies and require rigorous testing in ecological contexts. In many studies, melatonin suppression occurs at the minimum light levels tested, and, in better-studied groups, melatonin suppression is reported to occur at lower light levels. We identify major research gaps and conclude that, for most groups, crucial information is lacking. No studies were identified for amphibians and reptiles and long-term impacts of low-level ALAN exposure are unknown. Given the high sensitivity of vertebrate melatonin production to ALAN and the paucity of available information, it is crucial to research impacts of ALAN further in order to inform effective mitigation strategies for human health and the wellbeing and fitness of vertebrates in natural ecosystems.

Melatonin: a possible link between the presence of artificial light at night and reductions in biological fitness. Jones TM, Durrant J, Michaelides EB, Green MP. 2015, Phil. Trans. R. Soc. B 370: 20140122.
<https://royalsocietypublishing.org/doi/10.1098/rstb.2014.0122>

Abstract: The mechanisms underpinning the ecological impacts of the presence of artificial night lighting remain elusive. One suspected underlying cause is that the presence of light at night (LAN) suppresses nocturnal production of melatonin, a key driver of biological rhythm and a potent antioxidant with a proposed role in immune function. Here, we briefly review the evidence for melatonin as the link between LAN and changes in behaviour and physiology. We then present preliminary data supporting the potential for melatonin to act as a recovery agent mitigating the negative effects of LAN in an invertebrate. Adult crickets (*Teleogryllus commodus*), exposed to constant illumination, were provided with dietary melatonin (concentrations: 0, 10 or 100 µg ml⁻¹) in their drinking water. We then compared survival, lifetime fecundity and, over a 4-week period, immune function (haemocyte concentration, lysozyme-like and phenoloxidase (PO) activity). Melatonin supplementation was able only partially to mitigate the detrimental effects of LAN: it did not improve survival or fecundity or PO activity, but it had a largely dose-dependent positive effect on haemocyte concentration and lysozyme-like activity. We discuss the implications of these relationships, as well as the usefulness of invertebrates as model species for future studies that explore the effects of LAN.

Waters under Artificial Lights: Does Light Pollution Matter for Aquatic Primary Producers? Grubisic, M. (2018), Limnology and Oceanography Bulletin, 27: 76-81.
<https://aslopubs.onlinelibrary.wiley.com/doi/abs/10.1002/lob.10254>

Abstract: Bright night lights have become a symbol of development and prosperity in the modern world. But have you ever wondered how artificial light at night (ALAN) may be affecting living beings in our cities, and how it may be affecting us? As artificial illumination is transforming nocturnal environments around the world, light pollution associated with its use is becoming a topic of increasing interest in the scientific and public communities. Light pollution disrupts natural light regimes in many regions of the world, raising concerns about ecological and health impacts of this novel anthropogenic pressure. Most obviously, ALAN can influence night-active animals in urban and suburban areas, and most research in this growing field focuses on terrestrial organisms such as bats, birds, and insects. Effects on aquatic ecosystems are much less known. In particular, aquatic primary producers, such as microalgae, cyanobacteria, and plants, have rarely been studied despite their critical positioning in the base of aquatic food webs and the fundamental role that light plays in their ecology. For primary producers, light is a key source of both energy and environmental information; it influences their growth, production, and community structure. ALAN has therefore a large potential to influence their communities and induce bottom-up changes to aquatic ecosystems and ecosystem functions.

Global climate change and invariable photoperiods: A mismatch that jeopardizes animal fitness. Walker, WH, Meléndez-Fernández, OH, Nelson, RJ, Reiter, RJ. Ecol Evol. 2019; 9: 10044–10054.
<https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.5537>

Abstract: The Earth's surface temperature is rising, and precipitation patterns throughout the Earth are changing; the source of these shifts is likely anthropogenic in nature. Alterations in temperature and precipitation have obvious direct and indirect effects on both plants and animals. Notably, changes in temperature and precipitation alone can have both advantageous and detrimental consequences depending on the species. Typically, production of offspring is timed to coincide with optimal food availability; thus, individuals of many species display annual rhythms of reproductive function. Because it requires substantial time to establish or re-establish reproductive function, individuals cannot depend on the arrival of seasonal food availability to begin breeding; thus, mechanisms have evolved in many plants and animals to monitor and respond to day length in order to anticipate seasonal changes in the environment. Over evolutionary time, there has been precise fine-tuning of critical photoperiod and onset/offset of seasonal adaptations. Climate change has provoked changes in the availability of insects and plants which shifts the timing of optimal reproduction. However, adaptations to the stable photoperiod may be insufficiently plastic to allow a shift in the seasonal timing of bird and mammal breeding. Coupled with the effects of light pollution which prevents these species from determining day length, climate change presents extreme evolutionary pressure that can result in severe deleterious consequences for individual species reproduction and survival. This review describes the effects of climate change on plants and animals,

defines photoperiod and the physiological events it regulates, and addresses the consequences of global climate change and a stable photoperiod.

Effects of street lighting technologies on the success and quality of pollination in a nocturnally pollinated plant. Macgregor, C. J., M. J. O. Pocock, R. Fox, and D. M. Evans. 2019. *Ecosphere* 10(1):e02550
<https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1002/ecs2.2550>

Abstract: Artificial light at night (ALAN) is an increasingly important driver of global change. Lighting directly affects plants, but few studies have investigated indirect effects mediated by interacting organisms. Nocturnal Lepidoptera are globally important pollinators, and pollen transport by moths is disrupted by lighting. Many street lighting systems are being replaced with novel, energy-efficient lighting, with unknown ecological consequences. Using the wildflower *Silene latifolia*, we compared pollination success and quality at experimentally lit and unlit plots, testing two major changes to street lighting technology: in lamp type, from high-pressure sodium lamps to light-emitting diodes, and in lighting regime, from full-night (FN) to part-night (PN) lighting. We predicted that lighting would reduce pollination. *S. latifolia* was pollinated both diurnally and nocturnally. Contrary to our predictions, flowers under FN lighting had higher pollination success than flowers under either PN lighting or unlit controls, which did not significantly differ from each other. Lamp type, lighting regime, and distance from the light all significantly affected aspects of pollination quality. These results confirm that street lighting could affect plant reproduction through indirect effects mediated by nocturnal insects, and further highlight the possibility for novel lighting technologies to mitigate the effects of ALAN on ecosystems.

Cascading effects of artificial light at night: resource-mediated control of herbivores in a grassland ecosystem. Bennie J, Davies TW, Cruse D, Inger R, Gaston KJ. 2015. *Phil. Trans. R. Soc. B* 370: 20140131.
<https://royalsocietypublishing.org/doi/10.1098/rstb.2014.0131>

Abstract: Artificial light at night has a wide range of biological effects on both plants and animals. Here, we review mechanisms by which artificial light at night may restructure ecological communities by modifying the interactions between species. Such mechanisms may be top-down (predator, parasite or grazer controlled), bottom-up (resource-controlled) or involve non-trophic processes, such as pollination, seed dispersal or competition. We present results from an experiment investigating both top-down and bottom-up effects of artificial light at night on the population density of pea aphids *Acyrtosiphon pisum* in a diverse artificial grassland community in the presence and absence of predators and under low-level light of different spectral composition. We found no evidence for top-down control of *A. pisum* in this system, but did find evidence for bottom-up effects mediated through the impact of light on flower head density in a leguminous food plant. These results suggest that physiological effects of light on a plant species within a diverse plant community can have detectable demographic effects on a specialist herbivore.

Artificial night light alters ecosystem services provided by biotic components. Singhal, R.K., Chauhan, J., Jatav, H.S. et al. *Biologia Futura* (2021).
<https://doi.org/10.1007/s42977-020-00065-x>

Abstract Excerpt: This review highlights the impact of ALAN on the ecosystem and its living and non-living components, emphasizing to the terrestrial and aquatic ecosystem. Further, we summarize the means of minimizing strategies of ALAN in the environment, which are very crucial to reduce the further spread of night light contamination in the environment and can be useful to minimize the drastic impacts on the ecosystem.

City lights and urban air. Stark, H., Brown, S., Wong, K. et al. *Nature Geoscience*, Vol 4, Nov 2011.
<https://doi.org/10.1038/ngeo1300>
https://s3.amazonaws.com/wbez-assets/curiouscity/ngeo_1300_NOV11_auproof2.pdf
<https://cires.colorado.edu/news/bright-city-lights-affect-air-pollution>

Here we show that city lights can also alter the concentration of nitrate radicals, an important atmospheric oxidant. These alterations have potential — albeit small — consequences for pollution levels the following day... We converted satellite data on light intensity into nitrate radical loss, using our aircraft measurements, and show that the influence of city lights on nitrate radical loss can be large in regions outside Los Angeles... We also find that satellite-derived estimates of light levels tend to correlate positively with independent satellite-derived estimates of nitrogen dioxide. We therefore suggest that city lights are likely to influence nitrogen dynamics in other regions of the globe.

Nighttime photochemistry: nitrate radical destruction by anthropogenic light sources. Stark, H, et al. CIRES, NOAA. 2010.
https://www.academia.edu/23527679/Nighttime_photochemistry_nitrate_radical_destruction_by_anthropogenic_light_sources
Abstract extract: show airborne and ground measurements of absolute light intensities from anthropogenic and natural light sources (e.g. industrial and street lighting, full moon) as a newly discovered NO₃ loss process. This loss process has implications for nighttime pollutant levels and next-day ozone production.

Light Flicker from LED Lighting Systems-An Urgent Problem to Solve. GIES, T.H. (2016).

https://www.led-professional.com/resources-1/articles/lighting-flicker-from-led-lighting-systems/LpR53_p50-p59.pdf

Recent research has shown that fluctuations of short wavelength emissions are perceived to a higher extent and light flicker may have a huge influence on the well-being of end users.

Blue light excited retinal intercepts cellular signaling. Ratnayake, K., Payton, J.L., Lakmal, O.H. et al. Scientific Reports 8, 10207 (2018).

<https://doi.org/10.1038/s41598-018-28254-8>

Photoreceptor chromophore, 11-cis retinal (11CR) and the photoproduct, all-trans retinal (ATR), are present in the retina at higher concentrations and interact with the visual cells. Non-visual cells in the body are also exposed to retinal that enters the circulation. ... we uncovered that blue light-excited ATR and 11CR irreversibly change/distort plasma membrane (PM) bound phospholipid; phosphatidylinositol 4,5 biphosphate (PIP2) and disrupt its function. ... The change in PIP2 was followed by an increase in the cytosolic calcium, excessive cell shape change, and cell death... These findings suggest that retinal exerts light sensitivity to both photoreceptor and non-photoreceptor cells, and intercepts crucial signaling events, altering the cellular fate.

Blue light from phone screens accelerates blindness, study finds. The Guardian. 8/9/2018

<https://www.theguardian.com/society/2018/aug/09/blue-light-from-phone-screens-accelerates-blindness-study-finds>

Research... has revealed that prolonged exposure to blue light triggers poisonous molecules to be generated in the eye's light-sensitive cells that can cause macular degeneration – an incurable condition that affects the middle part of vision. Blue light, which has a shorter wavelength and more energy compared with other colours, can gradually cause damage to the eyes.

How the marvel of electric light became a global blight to health. Dr. Richard G 'Bugs' Stevens. Aeon. August 3, 2018.

<https://aeon.co/ideas/how-the-marvel-of-electric-light-became-a-global-blight-to-health>

Excerpts: Light at night constitutes a massive assault on the ecology of the planet, including us... The electric light bulb is touted as one of the most significant technological advancements of human beings... But as with any new and spectacular technology, there are invariably unintended consequences... The current 'lightmare' traces back to the 1950s, when a road-building frenzy, including construction of the Interstate Highway System, aimed to solve the problem of congestion in the United States. But the roads turned out to increase congestion and pollution, including light pollution, too... More efficient energy-production and use, without concerted public education on reduction of use, can make the pollution problem worse... The hyper-aggressive marketing of bright, white LED street lighting to cities and towns has advanced to a breathtaking level. The US Department of Energy (DoE) and a group of international partners have launched an effort called 'Rise and Shine: Lighting the World with 10 Billion LED Bulbs' in 'a race to deploy 10 billion high-efficiency, high-quality and affordable lighting fixtures and bulbs (like LEDs) as quickly as possible'... In response to this relentless attack on night, the American Medical Association (AMA) stepped up and adopted an official policy statement in 2016... The reaction from the DoE and the Illuminating Engineering Society of North America (IES) was swift and highly critical of the AMA's audacity, asserting that the AMA was not qualified to make any statements on lighting. But this reaction was disingenuous because without the AMA statement, the nationwide retrofit would have continued unabated without regard to the environment or human health. Electric light can be a great benefit to people when used wisely. To get to the 'used wisely' part requires all the science happening now. But there must also be a desire for effective use of electric lighting on the part of government and the public... few people will leave the faucet running much longer than necessary. Yet some people think nothing of using more electricity than they actually need... In the life of the planet, destruction of night is as important an issue as the poisoning of water and air.

Artificial Light at Night (ALAN): A Potential Anthropogenic Component for the COVID-19 and HCoV's Outbreak. Khan ZA,

Yumnamcha T, Mondal G, et al. Frontiers in endocrinology. 2020;11:622. Published 2020 Sep 10.

<https://www.frontiersin.org/articles/10.3389/fendo.2020.00622/full>

Abstract Excerpt: In this article, we tried to focus on the possible influence of this anthropogenic factor in human coronavirus (HCoV) outbreak. The relationship between the occurrences of coronavirus and the ascending curve of the night-light has also been delivered. The ALAN influences the physiology and behavior of bat, a known nocturnal natural reservoir of many Coronaviridae. The "threatened" and "endangered" status of the majority of bat species is mainly because of the destruction of their proper habit and habitat predominantly through artificial illumination. The stress exerted by ALAN leads to the impaired body functions, especially endocrine, immune, genomic integration, and overall rhythm features of different physiological variables and behaviors in nocturnal animals. Night-light disturbs "virus-host" synchronization and may lead to mutation in the genomic part of the virus and excessive virus shedding. We also proposed some future strategies to mitigate the repercussions of ALAN and for the protection of the living system in the earth as well.

Light pollution linked to preterm birth increase. Jan 25, 2021. Lehigh University. Science Daily.

<https://www.sciencedaily.com/releases/2021/01/210125191821.htm>

Scientists conducted the first study to examine the fetal health impact of light pollution based on a direct measure of skyglow, an important aspect of light pollution. Using an empirical regularity discovered in physics, called Walker's Law, a team found evidence of reduced birth weight, shortened gestational length and preterm births.

Association of Outdoor Artificial Light at Night With Mental Disorders and Sleep Patterns Among US Adolescents. Paksarian D, Rudolph KE, Stapp EK, et al. *JAMA Psychiatry*. 2020;77(12):1266–1275.
<https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2767698>
<https://edition.cnn.com/2020/07/08/health/night-light-pollution-disrupt-sleep-wellness/index.html>

In this study, area-level outdoor ALAN was associated with less favorable sleep patterns and mood and anxiety disorder in adolescents. Future studies should elucidate whether interventions to reduce exposure to ALAN may positively affect mental and sleep health.

Astronomy Impacts

Light Pollution In California And Arizona. Walker, Merle F. *Publications of The Astronomical Society of The Pacific*, Vol. 85, No. 507, 1973, pp. 508–519. *Jstor*
<http://www.jstor.org/stable/40675430>

The present and future effect of artificial illumination on ground-based optical astronomical observations in California and Arizona is discussed. It is concluded that the effectiveness of all major observatories in these states is presently or potentially limited by light pollution. Consequently, it is essential that immediate efforts be undertaken to: (1) Control outdoor illumination to lengthen the useful life of existing observatory sites, and (2) Identify and protect the best remaining sites both within and outside the United States. The characteristics and probable locations of the best sites for ground-based optical astronomical observations are discussed.

Light Pollution: Outdoor lighting is a growing threat to astronomy. Riegel, Kurt W. *Science*, Vol. 179, No. 4080, Mar 1973, pp. 1285–1291.

<https://pubmed.ncbi.nlm.nih.gov/17835929/>

Abstract Excerpt: The level of skylight caused by outdoor lighting systems is growing at a very high rate, about 20 percent per year nationwide. In addition, the spectral distribution of man-made light pollution may change in the next decade from one containing a few mercury lines to one containing dozens of lines and a significantly increased continuum level. Light pollution is presently damaging to some astronomical programs, and it is likely to become a major factor limiting progress in the next decade... Some is due to promotional campaigns, in which questionable arguments involving public safety are presented. There are protective measures which might be adopted by the government; these would significantly aid observational astronomy, without compromising the legitimate outdoor lighting needs of society.

Flagstaff's Battle for Dark Skies. Portree D.S.F. Oct 2002, *Griffith Observer*, Vol 66 No 10

<http://www2.lowell.edu/users/wes/GriffithObserver/crop.pdf>

<http://www.flagstaffdarks skies.org/international-dark-sky-city/flagstaffs-battle-for-dark-skies/>

Public Safety

Blinded by the Lights: Levi's Stadium Lights May Be Airport Safety Hazard. By Stephen Stock, Michael Bott and Jeremy Carroll. NBC Bay Area. Sept 22, 2015

<https://www.nbcbayarea.com/news/local/blinded-by-the-lights-levi-stadium-lights-may-be-airport-safety-hazard/102234/>

Some pilots say powerful lights above and around the new Levi's Stadium can cause safety hazards for flights in and out of San Jose Mineta International Airport.

Why Lighting Claims Might Well Be Wrong, Paul Marchant, *International Journal of Sustainable Lighting*: Vol. 19 No. 1 (2017)

<http://lightingjournal.org/index.php/path/article/view/71/79>

This paper gives some background to claims of benefit from road lighting and why large beneficial claims may be suspect.

Feeling Safe in the Dark: Examining the Effect of Entrapment, Lighting Levels, and Gender on Feelings of Safety and Lighting Policy Acceptability. Boomsma C, et al. *Environmental and Behavior*, Vol 46 Issue 2, pp 193-212. Sept 2012.

<https://journals.sagepub.com/doi/10.1177/0013916512453838>

Importantly, as hypothesized, perceived safety mediated the effect of lighting on acceptability levels, suggesting that people can accept lower lighting levels when social safety is not threatened.

The effect of reduced street lighting on road casualties and crime in England and Wales: controlled interrupted time series analysis. Steinbach R, Perkins C, Tompson L, et al, *J Epidemiol Community Health* 2015;69:1118-1124.

<https://jech.bmj.com/content/69/11/1118>

Conclusions: This study found little evidence of harmful effects of switch off, part-night lighting, dimming, or changes to white light/LEDs on road collisions or crime in England and Wales.

Light Pollution Mitigation

National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds, Commonwealth of Australia, Jan 2020

<https://www.environment.gov.au/biodiversity/publications/national-light-pollution-guidelines-wildlife>

Audubon's Lights Out program

<https://www.audubon.org/conservation/project/lights-out>

LoNNe, Loss of the Night Network

<http://www.cost-lonne.eu/recommendations/>

Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting, 2016, American Medical Association, CSAPH Report 2-A-16, Policy H-135.927

<https://policysearch.ama-assn.org/policyfinder/detail/H-135.927?uri=%2FAMADoc%2FHOD-135.927.xml>

<https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/about-ama/councils/Council%20Reports/council-on-science-public-health/a16-csaph2.pdf>

supports the proper conversion to community-based Light Emitting Diode (LED) lighting, which reduces energy consumption and decreases the use of fossil fuels.. encourages minimizing and controlling blue-rich environmental lighting by using the lowest emission of blue light possible to reduce glare... should be properly shielded to minimize glare and detrimental human and environmental effects, and... utilize the ability of LED lighting to be dimmed for off-peak time periods.

Advocating and Support for Light Pollution Control Efforts and Glare Reduction for Both Public Safety and Energy Savings, 2012, Policy H-135.937

<https://policysearch.ama-assn.org/policyfinder/detail/light%20pollution?uri=%2FAMADoc%2FHOD.xml-0-308.xml>

Our AMA: (1) will advocate that all future outdoor lighting be of energy efficient designs to reduce waste of energy and production of greenhouse gasses that result from this wasted energy use; (2) supports light pollution reduction efforts and glare reduction efforts at both the national and state levels; and (3) supports efforts to ensure all future streetlights be of a fully shielded design or similar non-glare design to improve the safety of our roadways for all, but especially vision impaired and older drivers.

International Dark-Sky Association, <https://darksky.org>, <https://darksky.org/light-pollution>

IDA Guidance for Electronic Message Centers (EMCs) – Digital billboards

<https://www.darksky.org/wp-content/uploads/2019/10/EMC-Guidelines-IDA2019-1.1.pdf>

IDA Criteria for Community-Friendly Outdoor Sports Lighting

<https://www.darksky.org/wp-content/uploads/2018/03/IDA-Criteria-for-Community-Friendly-Outdoor-Sports-Lighting.pdf>

Model Lighting Ordinances – Dark Sky Impacts, Flagstaff Dark Skies Coalition

<http://www.flagstaffdarks skies.org/model-lighting-ordinances-dark-sky-impacts/>

Led Lighting And Dark Skies: Are LEDs good for dark skies? Flagstaff Dark Skies Coalition.

<http://www.flagstaffdarks skies.org/led-lighting-dark-skies/>

Light Pollution and Lighting Codes: An Analysis of the Light Pollution Control Effectiveness of the IDA-IES Model Lighting Ordinance and the IDA Pattern Outdoor Lighting Code, Christian B. Luginbuhl, U.S. Naval Observatory Flagstaff Station, 15 January 2013

<http://www.flagstaffdarks skies.org/wp-content/uploads/2013/02/Lighting-Codes-and-LP-Luginbuhl-130115.pdf>

Excerpts: Under MLO standards, outside of MLO Lighting Zones 0 and 1, the total lumen allowances, direct uplight allowances, and amount of sky glow are notably greater than expected under POLC standards; in MLO Lighting Zones 3 and 4 they are dramatically greater. These lighting amounts and sky glow impacts are greater than what can be expected even when lighting is unregulated. The MLO Performance Method Option B provides notably poor control of direct uplight and therefore sky glow. Under the MLO Performance Method Option B there are no effective limitations on glare. MLO does not address lamp spectrum, and thus leaves this crucial aspect of light pollution unaddressed. Finally, the analysis shows that the MLO Prescriptive Hardscape Area and Performance Methods do not provide similar results in terms of total lumen amounts, uplight amounts, glare, or “offsite” impacts, an undesirable characteristic of a model regulation purporting to control light pollution. The Performance Method particularly allows for the most egregious forms of polluting lighting fixtures and designs. We find no evidence that communities adopting MLO can expect reduction in light pollution over that produced by typical unregulated lighting, despite the claims of MLO to be a method to “drastically reduce” light pollution.

Model Lighting Ordinance: Is the BUG rating method effective at limiting light trespass?, April/May 2012 issue of LEDs Magazine

<https://www.ledsmagazine.com/architectural-lighting/outdoor-lighting/article/16698628/model-lighting-ordinance-is-the-bug-rating-method-effective-at-limiting-light-trespass-magazine>

Excerpts: The MLO allows for the use of BUG ratings along with the performance method as long as there is no uplight used. This scenario would not only allow for more lumens on the site as compared to the prescriptive method, but also would allow for a greater amount of light spilling from the site than would be seen from sites that restrict the spill by using the calculation method. As proven from the studies done for this article, the BUG rating method cannot effectively control these extra lumens of spill light.

Hazard or Hope? LEDs and Wildlife. Longcore, Travis. (2018). LED Professional Review. 70. 52-57.

<https://www.led-professional.com/resources-1/articles/hazard-or-hope-leds-and-wildlife>

Conclusions: The efficiency benefits of LEDs and the resulting economic incentives will drive further conversion of outdoor and indoor lighting to the technology. If the tendency to light more when light is cheaper can be overcome, the other attributes of LEDs hold significant promise for reducing environmental effects. Realizing that promise requires designers and manufacturers to learn about and embrace the guidance that wildlife scientists can provide. In some instances it will be challenging - resisting the desire to up-light, using no more light than necessary, and educating clients on the benefits of spectral choices that do not look like daylight. In other contexts, environmental regulations are likely to dictate lighting choices and offer an opportunity if the industry is prepared to seize it. On each of the mitigation approaches - duration, direction, intensity, and spectrum - LEDs will inherently or can be designed to perform well. Whether they do in practice will be up to the LED professional.

Artificial Night Lighting and Protected Lands: Ecological Effects and Management Approaches (Revised August 2017).

Longcore, T., and C. Rich. Natural Resource Report NPS/NRSS/NSNS/NRR—2017/1493. National Park Service, Fort Collins, Colorado.

<https://irma.nps.gov/DataStore/DownloadFile/582058>

Artificial night lighting represents a growing challenge for managers of parks and protected lands. The disruption of natural patterns of light and dark, which have been more or less reliable for millions of years, has a range of adverse consequences for wildlife across taxonomic groups and landscape types. This document reviews effects of artificial night lighting by habitat type and discusses the approaches available to land managers to mitigate and avoid certain adverse effects of artificial night lighting.

Rapid assessment of lamp spectrum to quantify ecological effects of light at night. Longcore, T., A. Rodríguez, B.

Witherington, J. F. Penniman, L. Herf, and M. Herf. 2018. Journal of Experimental Zoology A 329:511-521.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/jez.2184>

Abstract: For many decades, the spectral composition of lighting was determined by the type of lamp, which also influenced potential effects of outdoor lights on species and ecosystems. Light-emitting diode (LED) lamps have dramatically increased the range of spectral profiles of light that is economically viable for outdoor lighting. Because of the array of choices, it is necessary to develop methods to predict the effects of different spectral profiles without conducting field studies, especially because older lighting systems are being replaced rapidly. We describe an approach to predict responses of exemplar organisms and groups to lamps of different spectral output by calculating an index based on action spectra from behavioral or visual characteristics of organisms and lamp spectral irradiance. We calculate relative response indices for a range of lamp types and light sources and develop an index that identifies lamps that minimize predicted effects as measured by ecological, physiological, and astronomical indices. Using these assessment metrics, filtered yellow-green and amber LEDs are predicted to have lower effects on wildlife than high pressure sodium lamps, while blue-rich lighting (e.g., $K \geq 2200$) would have greater effects. The approach can be updated with new information about behavioral or visual responses of organisms and used to test new lighting products based on spectrum. Together with control of intensity, direction, and duration, the approach can be used to predict and then minimize the adverse effects of lighting and can be tailored to individual species or taxonomic groups.

The LED Paradox: How Light Pollution Challenges Experts to Reconsider Sustainable Lighting. Schulte-Römer, N.; Meier, J.;

Söding, M.; Dannemann, E.; Sustainability 2019, 11, 6160.

<https://www.mdpi.com/2071-1050/11/21/6160>

Abstract: In the 21st century, the notion of “sustainable lighting” is closely associated with LED technology. In the past ten years, municipalities and private light users worldwide have installed light-emitting diodes in urban spaces and public streets to save energy. Yet an increasing body of interdisciplinary research suggests that supposedly sustainable LED installations are in fact unsustainable, because they increase light pollution. Paradoxically, blue-rich cool-white LED lighting, which is the most energy-efficient, also appears to be the most ecologically unfriendly. Biologists, physicians and ecologists warn that blue-rich LED light disturbs the circadian day-and-night rhythm of living organisms, including humans, with potential negative health effects on individual species and whole ecosystems. Can the paradox be solved? This paper explores this question based on our transdisciplinary research project Light Pollution—A Global Discussion. It reveals how light pollution experts and lighting professionals see the challenges and potential of LED lighting from their different viewpoints. This expert feedback shows that “sustainable LED lighting” goes far beyond energy efficiency as it raises complex design issues that imply stakeholder negotiation. It also suggests that the LED paradox may be solved in context, but hardly in principle.

Tuning the white light spectrum of light emitting diode lamps to reduce attraction of nocturnal arthropods. Longcore Travis, Aldern Hannah L., Eggers John F., Flores Steve, Franco Lesly, Hirshfield-Yamanishi Eric, Petrincic Laina N., Yan Wilson A. and Barroso André M. 2015, Phil. Trans. R. Soc. B37020140125
<https://royalsocietypublishing.org/doi/abs/10.1098/rstb.2014.0125>

Abstract: Artificial lighting allows humans to be active at night, but has many unintended consequences, including interference with ecological processes, disruption of circadian rhythms and increased exposure to insect vectors of diseases. Although ultraviolet and blue light are usually most attractive to arthropods, degree of attraction varies among orders. With a focus on future indoor lighting applications, we manipulated the spectrum of white lamps to investigate the influence of spectral composition on number of arthropods attracted. We compared numbers of arthropods captured at three customizable light-emitting diode (LED) lamps (3510, 2704 and 2728 K), two commercial LED lamps (2700 K), two commercial compact fluorescent lamps (CFLs; 2700 K) and a control. We configured the three custom LEDs to minimize invertebrate attraction based on published attraction curves for honeybees and moths. Lamps were placed with pan traps at an urban and two rural study sites in Los Angeles, California. For all invertebrate orders combined, our custom LED configurations were less attractive than the commercial LED lamps or CFLs of similar colour temperatures. Thus, adjusting spectral composition of white light to minimize attracting nocturnal arthropods is feasible; not all lights with the same colour temperature are equally attractive to arthropods.

Evaluating Potential Spectral Impacts of Various Artificial Lights on Melatonin Suppression, Photosynthesis, and Star Visibility. Aubé M, Roby J, Kocifaj M (2013). PLOS ONE 8(7): e67798.

<https://doi.org/10.1371/journal.pone.0067798>

Abstract Excerpt: Artificial light at night can be harmful to the environment, and interferes with fauna and flora, star visibility, and human health. To estimate the relative impact of a lighting device, its radiant power, angular photometry and detailed spectral power distribution have to be considered. In this paper we focus on the spectral power distribution... In this paper we propose three new indices to characterize lamp spectra. These indices have been designed to allow a quick estimation of the potential impact of a lamp spectrum on melatonin suppression, photosynthesis, and star visibility. We used these new indices to compare various lighting technologies objectively. We also considered the transformation of such indices according to the propagation of light into the atmosphere as a function of distance to the observer. Among other results, we found that low pressure sodium, phosphor-converted amber light emitting diodes (LED) and LED 2700 K lamps filtered with the new Ledtech's Equilib filter showed a lower or equivalent potential impact on melatonin suppression and star visibility in comparison to high pressure sodium lamps. Low pressure sodium, LED 5000 K-filtered and LED 2700 K-filtered lamps had a lower impact on photosynthesis than did high pressure sodium lamps. Finally, we propose these indices as new standards for the lighting industry to be used in characterizing their lighting technologies.

Solid-State Roadway Lighting Design Guide: Volume 1: Guidance. National Academies of Sciences, Engineering, and Medicine. 2020. <https://doi.org/10.17226/25678>

Solid-State Roadway Lighting Design Guide: Volume 2: Research Overview. National Academies of Sciences, Engineering, and Medicine. 2020. <https://doi.org/10.17226/25679>

Assessment of Citizens' Actions against Light Pollution with Guidelines for Future Initiatives. Zielińska-Dabkowska, K.M.; Xavia, K.; Bobkowska, K. Sustainability. June 2020, 12, 4997.

<https://doi.org/10.3390/su12124997>

Abstract excerpt: This paper therefore investigates the various actions taken by citizens, as well as the challenges, methods, and tools involved, regarding good practices initiated by grass roots activism on how to reduce existing and potential light pollution. The results of a comparative analysis of 262 international case studies (lawsuits and online petitions) reveal that, since the 1990s, there has been an increase in the number of legal cases related to light pollution due to the rise in public awareness, the availability of scientific knowledge via the Internet, and the ability to take accurate lighting measurements and perform lighting simulations. Also, in the last decade a new tool for digital participation in the form of online petitions has established a new movement of citizen action to mitigate the effects of light pollution. Based on this information, a seven-step framework involving recommendations for citizen action has been developed. It is expected that this new knowledge will benefit those citizens planning future efforts involving the development, implementation, and monitoring processes of outdoor lighting. Additionally, it might support the evolution of planning and policy approaches that are sustainable and necessary to improve the application and installation of ecologically/biologically responsible illumination for towns, cities, and natural habitats.

Nevada Senate passes bill to form 'dark sky places' program. Feb 22, 2021. By Sam Metz, AP News

<https://apnews.com/article/legislature-nevada-light-pollution-coronavirus-pandemic-kate-marshall-e0f69ee3c5895b1f7dd4d89b1ea3ebc>

Nevada's state Senate took a step toward ensuring stargazers will continue to enjoy picture-perfect constellations on Monday, passing a bill to recognize "dark sky places" with unobstructed views of galaxies hundreds of thousands of light years away.

Urban Lighting Research Transdisciplinary Framework—A Collaborative Process with Lighting Professionals. Pérez Vega, C.; Zielinska-Dabkowska, K.M.; Hölker, F. *Int. J. Environ. Res. Public Health.* 2021, 18, 624.

<https://doi.org/10.3390/ijerph18020624>

Abstract Excerpt: Over the past decades, lighting professionals have influenced the experience of the night by brightly illuminating streets, buildings, skylines, and landscapes 24/7... a dual perspective on night-time was shaped and the visual enjoyment of visitors after dusk was prioritized over natural nightscapes (nocturnal landscapes). During this time, researchers of artificial light at night (ALAN) observed and reported a gradual increase in unnatural brightness and a shift in color of the night-time environment. As a consequence, ALAN has been identified as a relevant pollutant of aquatic and terrestrial habitats, and an environmental stressor, which may adversely affect a wide range of organisms, from micro-organisms to humans... This paper presents a framework to help reduce the existing gap of knowledge, because appropriate lighting applications depend upon it. Access to less light polluted nightscapes in urban environments is just as important as access to unpolluted water, food, and air.

On-line Workshop “Dark and Quiet Skies for Science and Society”, Report and Recommendations, Dec 2020, coordinated by the United Nations Office for Outer Space Affairs

https://unoosa.org/osa/en/ourwork/psa/schedule/2020/2020_dark_skies.html

to propose to COPUOS [United Nations Committee on the Peaceful Uses of Outer Space]... recommendations, to be acted upon either by local governments or agreed to at an international level... This report analyses all artificial interference that can have a negative impact on the visibility of the night sky. These interferences can be logically grouped into three categories... effect caused by the artificial emission of visible light during the night,... impact that the very large number of communication satellites in Low Earth Orbit... to the interference that radio broadcasting... have on observations by radio telescopes.

Grasping darkness: the dark ecological network as a social-ecological framework to limit the impacts of light pollution on biodiversity. Challéat, S., et al. 2021. *Ecology and Society* 26(1):15.

<https://doi.org/10.5751/ES-12156-260115>

Abstract excerpt: Artificial light at night (ALAN)... is increasingly recognized as a major threat to global biodiversity, which ultimately alters the amount, the quality, and the connectivity of available habitats for taxa... Here we present the concept of “dark ecological network.” We show this concept is able to grasp the effects of ALAN in terms of habitat disturbances and integrates temporal dimensions of ecological processes into biodiversity conservation planning... we propose a course of action that consists of building an interdisciplinary repertoire of contextualized knowledge (e.g., impacts on wildlife, human/lightscape relationship, existing legal tools, etc.), in order to deduce from it a number of practical supports for the governance of the dark ecological network in response to societal and ecological issues.

Letter O-2 Response: SCVAS & GreenSpacesMV, September 5, 2022

- O-2-1 The City of Mountain View appreciates input from the SCVAS and GreenSpacesMV concerning their interest in potential impacts to biological resources, especially in the North Bayshore planning area. The comment states that the North Bayshore Precise Plan requirements and development standards should be updated to reflect new scientific knowledge in three topic areas that are described in subsequent comments: lighting, loss of trees, and protection of burrowing owls at Shoreline Park. The introductory comment does not cite a deficiency in the Draft EIR and is noted.
- O-2-2 Citing several credible sources, the comment states that the adopted North Bayshore Precise Plan should be amended to greater regulate outdoor LED light fixtures and thereby minimize the impacts of night lighting on wildlife. Through provided citations, the comment frames a discussion that certain types of lighting, specifically some LED lights, can negatively affect wildlife species. Several lighting management recommendations are provided which include eliminating minimum lighting requirements, reducing light brightness, requiring low Kelvin color temperature bulbs on outdoor lighting (2400 Kelvin or less), and the use of dimmers on outdoor lights. The comment only generally states that outdoor lighting can have negative effects on wildlife without specific mention of deficiencies in the DEIR analysis or a description of a specific mechanism by which wildlife species would be negatively affected by lighting. As the DEIR discloses, much of the planned new housing would be infill development that is away from avian movement corridors and distant from areas with natural wildlife habitat. The North Bayshore Precise Plan presently requires the incorporation of bird safe design measures for new construction and major renovations in the North Bayshore Precise Plan (Draft EIR, p. 4.3-26); however, the City does not have a “bird safe and dark sky” ordinance that addresses the topic of light pollution. Given the infill nature of the Project within developed portion of the City and the absence of a local ordinance that provides a nexus for impact significance, potential impacts to wildlife related to lighting would be less than significant and would not require mitigation. The suggestions from SCVAS and GreenSpacesMV and copies of the International Dark-Sky Association article, “Artificial Light at Night: State of the Science 2022” have been included in the record, where they may be considered by the City as part of the decision-making process.
- O-2-3 The comment is concerned that the Project will impact urban trees and that there are inadequate locations to plant replacement trees, which it concludes will result in a loss of trees and tree canopy within the City. The comment further requests an analysis of potential impacts to trees and replacement sites, stating that if trees and canopy cannot be replaced in a reasonable timeframe, then the impact should be considered significant and unavoidable. The City plans to preserve and manage the

existing urban forest, with no substantial changes in urban tree canopy under the proposed Project. The City of Mountain View's Forestry Division recognizes urban trees as a valuable community resource. As such, the City closely regulates the removal of heritage trees, which it defines as any tree with a trunk circumference of 48" or more, measured at 54" above the natural grade, and any oak, redwood, or cedar tree with a circumference of 12" or more when measured 54" above natural grade. The City maintains a detailed process to remove trees, which requires approval by a certified arborist and a required planting plan. In keeping with the City's commitment to preserve its urban forest, the review of new developments under the HEU will include an evaluation of open space and landscaping plans. Tree removals performed under approved HEU projects would be done on a case-by-case basis in compliance with existing City policies protecting heritage trees under the direction of a qualified arborist and with an approved replanting plan.

- O-2-4 The comment relates to the management and recovery of the burrowing owl population at Shoreline Park. It states that despite informational signage and ranger patrols, disruptive behaviors by humans and dogs continue to have a detrimental effect on owls. With the planned additional residences in the North Bayshore area, the comment speculates that encroachments into owl habitat will continue. As a remedy, the comment suggests the use of fencing around the park to make the area inaccessible to the public after hours. The North Bayshore Precise Plan area is the closest planning area to Shoreline Park. As noted in the Draft EIR (p. 4.3-9), the City supports an ongoing burrowing owl monitoring and management program in the park. The DEIR also recognized that the increased presence of people, pets (dogs and cats), and children related to residential development could have indirect impacts to burrowing owls at Shoreline Park (Draft EIR p. 4.3-15). The City of Mountain View Parks Division manages Shoreline Park as a recreational multi-use area for the benefit of burrowing owls. City biologists continue to identify and resolve potential wildlife management conflicts at Shoreline Park as they occur, including the ongoing monitoring, management, and protection of burrowing owls. Should park staff identify recreational conflicts with burrowing owls, they will respond accordingly in keeping with the *2017-2023 Parks, Recreation & Open Space Plan*, and the forthcoming *Shoreline Wildlife Management Plan*. In summer 2022, the City solicited comments on the *Shoreline Wildlife Management Plan*, which was the appropriate vehicle to suggest fencing options for owl protection. With these protections in place, even with a potential increase in local recreational pressure at Shoreline Park, the existing park management plans provide an appropriate means to manage burrowing owl populations within the City of Mountain View. No additional impacts were identified in the comment and no mitigation is required to address this indirect, less than significant impact.

From: [Hala Alshahwany](#)
To: [Yau, Ellen](#); [Planning Division](#)
Cc: [City Manager](#); [City Council](#)
Subject: Housing Element EIR Input
Date: Saturday, September 3, 2022 7:00:10 PM

CAUTION: EXTERNAL EMAIL - Ensure you trust this email before clicking on any links or attachments.

Hello Ms. Yau, City Staff, and Council Members,

Thanks for the opportunity to comment on the draft EIR for the Housing Element proposal. The project’s goal is to add 15,000 new residential units in MV to meet the next RHNA cycle requirements, adding significant population (30,000+ individuals), buildings and infrastructure to support this large increase.

I-1-1

I found the report lacking in addressing the serious adverse impacts of this project on existing residential population and natural resources and habitats in the city. The listed objectives on p.2-6 do call for protection of existing housing, encouraging new ones, removing constraints and providing fair housing, but when I looked at the potential impacts of various aspects of this big undertaking, the impacts descriptions were unrealistic and unsound, leading to very few mitigations, if any, to be presented.

The critical impacts in many sections were nearly all described as “non-conflicting” ones, listing no significant or adverse effects. This was clearly the approach in p.2-9 section 4.2 **Air Quality**, p.2-12, section 4.3 **Biological Resources**, p.2-17 section 4.7 **GHG Emissions**, p.2-19 section 4.10 **Land Use and Planning**, p.2-20 section 4.11 **Noise**, and p.2-12 section 4.13 **Public Services and Recreation**.

I-1-2

Typically impacts are listed and then evaluated through assessment and mitigation columns. Listing most of the above impacts as “non conflicting” is very misleading, because it’s making an assumption that may or may be accurate. This evaluation seems ludicrous to me. The impacts should clearly be listed and then evaluated accordingly, without assumptions.

The magnitude of this project is logistically huge on a city our size. Constructing significant number of buildings and bringing nearly 40% more people with all the infrastructure needs should have significant impacts on every section listed above. This doesn’t even include the **Transportation** section 4.14 p.2-23. The mitigations listed for the latter have shown to be ineffective in the past, and there is no guarantee they will work on this large scale proposal.

I-1-3

Please re-evaluate the significance of these impacts using better consultants and tools, and present an accurate and realistic assessment of how it can be accomplished while keeping us and our environment healthy and sustainable.

I-1-4

Thank you.
Hala Alshahwany
Cuesta Park Resident

Letter I-1: Hala Alshahwany, September 3, 2022

I-1-1 This is a general comment and does not identify specific issues other than general assertions of inadequacy, and, thus, no response is required. Throughout Chapter 4 the Draft EIR evaluates over 80 project-specific impacts as well as cumulative impacts and identifies 11 mitigation measures to avoid or reduce the severity or magnitude of significant impacts (also see Chapter 2, *Summary*).

The Draft EIR evaluated the potential for approximately 15,000 multi-family housing units (including approximately 96 accessory dwelling units) during the HEU planning period as a maximum scenario for purposes of the CEQA evaluation, understanding that the buffer size and the final sites selected for inclusion in the Housing Element will be determined by the City Council upon adoption of the HEU. It is important to note that approximately 13,600 units are already allowed under the City's adopted General Plan, zoning, and Precise Plans, and this development potential has been studied previously for potential environmental impacts in the larger Precise Plan EIRs and/or the City's General Plan EIR. The remaining 1,400 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately 2,700 units beyond 2031.

As such, only a small percentage of increased development potential (approximately 4,100 units) would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. While State law requires the Housing Element to include an inventory of housing sites and requires the City to appropriately zone sites for multifamily housing, the City is not required to actually develop/construct housing on these sites. Future development on identified sites would be at the discretion of individual property owners and would be largely dependent on market forces and -- in the case of affordable housing -- available funding and/or other incentives. Nonetheless, this EIR considers potential impacts of development that may result from adoption of the HEU, focusing on proposed actions to encourage housing production such as changes in allowable densities, changes in development standards, and adoption of incentives.

This EIR is a Program EIR, which has been prepared to evaluate the anticipated environmental effects of the proposed HEU in conformance with the provisions of CEQA and the CEQA *Guidelines*. As a program EIR, this EIR analyzes potential impacts of development that would be allowed by the HEU without having site-specific development proposals in hand, and broadly considers proposed sites, their environmental setting, and potential impacts that could stem from their development. Readers will note that the level of detail is different than in a project-specific EIR, which generally considers a single, specific proposal on an individual site. Future discretionary actions that would be facilitated by the HEU's adoption, such as those

related to the development of housing, would be assessed to determine consistency with the analysis provided in this program EIR.

- I-1-2 It is unclear what the commenter is referring to as “non-conflicting” impacts. As discussed in Section 4.0 of the Draft EIR, impacts are classified as significant or less than significant. A Project impact is considered less than significant when the physical change caused by the project would not exceed the applicable significance threshold. A Project impact is considered significant if the Project would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of Project-related physical changes compared to specified significance thresholds, which may be qualitative or quantitative (Draft EIR p. 4.0-2). After mitigation is applied, impacts are classified as less than significant with mitigation or significant and unavoidable with mitigation.

The commenter then lists various pages and topics in the Summary Chapter of the Draft EIR (Chapter 2), but does not identify specific issues other than general assertions of inadequacy. As provided by Section 15123 of the CEQA *Guidelines*, Chapter 2 of the Draft EIR provides a brief summary of the HEU and its consequences. Chapter 2 is intended to summarize in a stand-alone section the Project described in Draft EIR Chapter 3, *Project Description*, the impacts and mitigation measures discussed in Draft EIR Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, and the alternatives analysis presented in Draft Chapter 5, *Alternatives to the Project*.

The commenter is directed to the Draft EIR Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, which is divided into technical sections (e.g., Section 4.2, *Air Quality*) that present the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment for each environmental resource issue area. Where required, potentially feasible mitigation measures are identified to lessen or avoid potentially significant impacts. Each section includes an analysis of project-specific and cumulative impacts for each issue area. Specifically, see Draft EIR Section 4.2, *Air Quality*; Section 4.3, *Biological Resources*; Section 4.7, *Greenhouse Gas Emissions*; Section 4.10, *Land Use and Planning*; Section 4.11, *Noise*; and Section 4.13, *Public Services and Recreation*.

- I-1-3 This is a general comment and does not identify specific issues other than general assertions of inadequacy. See Response to Comment I-1-2 that directs the commenter to the information presented in the Draft EIR for the topics identified in the previous comment. With regard to impacts related to transportation, Section 4.14, *Transportation*, of the Draft EIR presents the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment for this topic.

Based on the adopted transportation policy, most residential projects will reduce vehicle miles traveled (VMT), the metric for measuring CEQA transportation impact and will meet the City's adopted thresholds. This measure of transportation impact measures the benefit of much needed housing in the region and quantifies the benefit in reduced vehicle travel by reducing the vehicle miles between housing and employment.

However, projects that do not meet the City adopted policy, Mitigation Measure TRA-1, Implement VMT Reduction Measures, was identified to reduce potentially significant VMT impacts associated with implementation of the proposed HEU. Individual multifamily housing development proposals that do not screen out from VMT impact analysis would be required to provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact would be required to include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the VTA VMT tool. The measures contained within VTA's VMT tool are based on supporting studies which demonstrate the effectiveness of the VMT reductions.

Additionally, development projects proposed under the HEU that generate at least 20 net new peak-hour trips (or those within a Precise Plan area) would require completion of a Multi-modal Transportation Analysis (MTA) during the entitlement process, which would address many non-CEQA transportation concerns. The MTA would ensure that the proposed development conforms with City policies (including traffic calming, neighborhood intrusion, and enhancing publicly accessible bicycle, pedestrian, and transit connections), that adequate multimodal site access and circulation are provided, appropriate fair-share fees are identified, and that operational improvements support pedestrian, bicycle, and transit quality of service.

- I-1-4 This is a general comment and does not identify specific issues other than general assertions of inadequacy. The Draft EIR meets all requirements of CEQA, including detailed analyses of potential direct, indirect, and cumulative impacts on the environment supported by a long list of references and exercise of appropriate methodologies and professional judgement, and provides enforceable mitigation measures for the significant impacts identified (Draft EIR Chapter 4).

3.4 Responses to Public Hearing Comments

This section presents responses to verbal comments received on the Draft EIR at the City of Mountain View EPC meeting held on Wednesday, August 3, 2022. Responses are presented to summarized verbal comments, grouped by topic. Rather than responding individually and repetitively, grouped responses by topic have been developed to address such comments comprehensively. Responses focus on comments raised that pertain to the adequacy of the analysis in the EIR or to other aspects pertinent to the potential effects of the Project on the environment pursuant to CEQA.

EPC Comment Response 1: Water Supply

A number of comments were provided on the HEU's effects on water supply and whether adequate water supply would be available to accommodate the growth anticipated by the proposed HEU in addition to existing commitments and drought-related conditions.

Potential impacts on water supply were discussed in Section 4.15, *Utilities and Service Systems*, of the Draft EIR. The thresholds used to determine the significance of impacts related to water supply were based on Appendix G of the *CEQA Guidelines*. Implementation of the HEU could have a significant impact on the environment related to water supply if there are not sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (Draft EIR p. 4.15-15).

As discussed in the Draft EIR, implementation of the HEU would result in increased demand for potable water. The total number of dwelling units exceed the previously anticipated housing units studied in the City's 2020 Urban Water Management Plan (UWMP) by approximately 11,100 dwelling units. As such, a water supply assessment (WSA) was prepared for the HEU by Schaaf & Wheeler on behalf of the City of Mountain View (Draft EIR Appendix D). The total water demand projected for the HEU at build-out beyond what was included in the City's 2020 UWMP was estimated to be approximately 1.1 million gallons per day (mgd) or 1,244 acre-feet per year (AFY) and represents the estimated increase beyond the City's 2020 UWMP as a result of the HEU, including the water demands of the residential buildings and surrounding landscaping. These estimates are conservative as they do not account for existing water use credits for redevelopment sites, on-site water conservation efforts such as landscaping with low water use plants, the use of recycled water for irrigation, dual plumbing and low flow sanitary fixtures, and technologies associated with LEED construction (Draft EIR p. 4.15-19). As such the WSA presented a "worst-case scenario" with regard to the projected water demand anticipated as a result of the proposed HEU.

The Draft EIR concluded that the City of Mountain View water system has sufficient existing water supply to fully support development under the HEU above what was considered in the 2020 UWMP under normal, single dry, or multiple dry water years (Draft EIR p. 4.15-19). "Single and multiple dry year" conditions account for the "drought conditions" that were raised as an issue of concern during the EPC hearing. The WSA described that shortfalls of up to 20% are projected for single dry-years and for multiple dry-years. Under all conditions, the City may need to impose water conservation measures, per Mountain View Municipal Code, Section 35.28, to reduce

demand. Additionally, depending on the final outcome and implementation of the State Water Resources Control Board's *Bay Delta Water Quality Control Plan*, Mountain View's primary water supply from the San Francisco Public Utilities Commission may be reduced significantly during dry years. Although the status of the Bay Delta Plan is still undetermined, Mountain View plans to utilize local groundwater wells as needed during dry years in order to limit cutbacks to 20 percent, and implement the City's Water Shortage Contingency Plan to reduce water demand during droughts (Draft EIR p. 4.15-19).

It is also noted that the new construction anticipated as a result of the proposed HEU, would comparatively be more water efficient than existing construction in the City. As described in the Draft EIR, projects developed as a result of the HEU would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code requires that irrigation controllers be weather- or soil moisture-based and automatically account for rainfall, or be attached to a rainfall sensor. Additionally, the projects would be required to comply with Standard Condition of Approval (Landscaping) and the City of Mountain View Water Conservation in Landscaping Regulations and the Mountain View Green Building Code (MVGBC) which include water conservation requirements. Under the MVGBC, new buildings must use water-efficient plumbing fixtures or demonstrate a 20 percent reduction from a baseline water use. City Standard Conditions of Approval also require projects to install plants with low water requirements and include efficient irrigation systems in landscape design. Implementation of water conservation and efficiency measures would minimize the potable water demand generated (Draft EIR p. 4.15-20).

Additionally in response to comments regarding increasing the use of recycled water, projects developed within the North Bayshore Precise Plan area would be required to use recycled water for irrigation and projects developed within the East Whisman Precise Plan area would be required to construct recycled water compatible irrigation systems for connection to future extension of the recycled water system to the area, which would also reduce the potable water demand (Draft EIR p. 4.15-20). The City's *2022 Recycled Water Feasibility Study*, analyzed the feasibility of providing recycled water supply to areas not currently served by recycled water, including the East Whisman area and other areas of the City including the commercial areas of Castro Street, the San Antonio Precise Plan area, and Downtown. The study recommended near-term recycled water expansion throughout the North Bayshore area and a future expansion, via Middlefield Road, to serve the East Whisman area. Expansion to areas outside of North Bayshore and East Whisman is considered very long term and should not be considered until additional supply is procured, and the system is expanded to East Whisman.⁷

None of the comments that were submitted during the Draft EIR's circulation period related to water supply have raised any new environmental issues or presented any significant new information that has not already been adequately described and evaluated in the Draft EIR, or effectively supplemented and clarified in this response. Therefore, no further response is required.

⁷ City of Mountain View, 2022. *Recycled Water Feasibility Study*, March 2022. Available at: <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=37451>.

All water supply-related comments and issues of concern, however, will be forwarded to the applicable decisionmakers as they consider whether or not to approve the HEU.

EPC Comment Response 2: Parks and Recreation

A number of comments expressed concern over the adequacy of existing and future parkland in the City to support the increase in population as a result of the HEU. Comments also expressed concern that a significant parks and recreation impact could occur due to the level of growth and the overestimation of parkland in the City due to the inclusion of Shoreline at Mountain View Regional Park in the calculations.

Potential impacts related to parks and recreation were discussed in Draft EIR Section 4.13, *Public Services and Recreation*. Potential direct impacts to parks were discussed relative to potential substantial adverse physical impacts associated with the provision of new or physically altered park facilities, or the need for new or physically altered park facilities, as directed by the Significance Thresholds defined in Appendix G of the *CEQA Guidelines*. Similarly, potential direct impacts to recreation are discussed related to the accelerated substantial physical deterioration of recreational facilities and the construction/expansion of recreational facilities.

Implementation of the HEU could have a significant impact on schools if: (1) it would require the construction of new or physically altered parks and recreation facilities in order to maintain acceptable levels of school services; and (2) the construction or alteration of such parks and recreation facilities would result in a substantial adverse physical impact on the environment (Draft EIR p. 4.13-12). CEQA regulations and applicable case law on this issue demonstrate the threshold concerns only the environmental effects associated with the provision of new or altered physical public service facilities.⁸ While comments also questioned the feasibility of achieving the General Plan goal of 3 acres of parkland per 1,000 residents due to space limitations in the City. Parkland service goals and other performance objectives are relevant to the analysis only within the context of whether or not new or expanded facilities would be required to meet defined criteria related to those service objectives, and what the environmental effects would be of providing those facilities.

The Draft EIR disclosed information pertaining to the City's goal of 3.00 acres of open space per 1,000 residents with and without inclusion of the North Bayshore Planning Area open space (containing Shoreline at Mountain View Regional Park). The Draft EIR found that the HEU would worsen existing parkland deficiencies in the City when the North Bayshore Planning Area is excluded. As the residential population of Mountain View increases as a result of the HEU, the construction of new parks and recreation facilities in the City would occur and individual projects under the HEU would be subject to the City's Parkland Dedication Ordinance, which requires land dedication or payment of a fee in lieu thereof. The park projects developed as a result of the Park Land Dedication Ordinance would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any

⁸ CEQA Guidelines Section 15382 restricts the effects that CEQA mitigation addresses to those "significant effects on the environment" which are defined to include "adverse change in any of the physical conditions within the area affected by the project" "An economic or social change by itself shall not be considered a significant effect on the environment." 14 Cal. Code Regs. §15382.

construction-related or operational effects of those facilities. As such parkland impacts were determined to be less than significant (Draft EIR p.4.13-18-19). As a matter of information, when the North Bayshore Planning Area containing the regional open space is included the City well exceeds its established goal.

Regarding impacts to existing parks and recreational facilities, the Draft EIR found that the Project's impacts related to accelerated substantial physical deterioration of parks and recreational resources would be less than significant and no mitigation would be required (Draft EIR p. 4.13-17). While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increased use in existing neighborhood and regional parks, and recreational facilities; however, there is no evidence to suggest that the potential increase in recreational users would substantially increase or accelerate the physical deterioration or degradation of nearby recreational facilities, such that mitigation would be required for physical impacts related to the construction/expansion of existing recreational facilities.

Comments also expressed concern in general over the cumulative impact on parks. As discussed in the Draft EIR, the HEU, in combination with cumulative projects in the City would incrementally increase the demand for and use of existing parks and recreation facilities. Similar to the HEU, cumulative development would be subject to the City's standard conditions of approval and Park Land Dedication Ordinance that contribute to long-term parks and recreational facilities planning and capacity improvements. The park projects developed as a result of the Park Land Dedication Ordinance would be required to undergo environmental review as they are identified. The City would also be required to ensure compliance with General Plan Policies POS-1.1 and POS-1.2 related to the demand for parks and recreational facilities (Draft EIR p. 4.13-20).

Comments were also raised expressing concern over the joint-use agreements with local school districts to share the use of recreational resources. As discussed in the Draft EIR, school sites are an important part of the City's park system as many residents rely on nearby schools to provide neighborhood recreational resources (Draft EIR p. 4.13-4). Consistent with General Plan Policy POS-5.1, the City will continue cooperative arrangements with school districts to use open space and facilities at schools for public parks, playgrounds and recreation programs and establish new arrangements as conditions evolve in the City.

None of the comments that were submitted during the Draft EIR's circulation period related to parks and recreation have raised any new environmental issues or presented any significant new information that has not already been adequately described and evaluated in the Draft EIR, or effectively supplemented and clarified in this response. Therefore, no further response is required. All parks and recreation-related comments and issues of concern, however, will be forwarded to the applicable decisionmakers as they consider whether or not to approve the HEU.

EPC Comment Response 3: Cumulative Impacts

A number of comments also expressed general concern regarding cumulative impacts of the Project on public services, transportation, and utilities.

Public Services

Comments also included concern over the cumulative impacts on fire and police services, and whether the impacts of a new fire or police station should be studied. As also described in EPC Comment Response 2, CEQA regulations and applicable case law on public services impacts demonstrate the threshold concerns only the environmental effects associated with the provision of new or altered physical public service facilities. As discussed in Draft EIR Section 4.13, additional fire and police protection facilities are not expected to be required to serve the population as a result of the HEU. However, if and when the construction or expansion of facilities to accommodate additional personnel or equipment should become necessary, CEQA review, General Plan provisions, Municipal Code regulations, and payment of impact fees would all be required. It is noted that the Mountain View Police and Fire Departments are working on plans for a new headquarters building, which would likely replace the facility on the current site with a new two-story building. Fire stations in the City could also potentially require remodeling, expansion, or rebuilds in the future to serve cumulative demand. While the proposed HEU would contribute to the need for these facilities, potential impacts would remain less than significant. Consistent with the analysis in the Draft EIR, if and when the construction or expansion of facilities to accommodate additional personnel or equipment should become necessary, CEQA review, General Plan provisions, Municipal Code regulations, and payment of impact fees would all be required.

Specific concerns regarding cumulative impacts related to schools and specifically the high school district were also raised. See Responses to Comment Letter A-3 from MVLA with regard to impacts on schools and MVLA specifically.

Transportation

Concern regarding cumulative traffic impacts in general were also raised. Cumulative impacts related to transportation were discussed in Section 4.14, *Transportation*. The Draft EIR found that with implementation of the HEU, in combination with cumulative development, cumulative impacts related to conflicts with circulation-related plans, VMT, traffic safety hazards, and emergency access would all be less than significant (Draft EIR p. 4.14-25-26). It is also noted that traffic congestion or measures of vehicular delay are not an environmental impact under CEQA per State CEQA Guidelines Section 15064.3.b. However, as described in Response to Comment A-3-13 above, development projects proposed under the HEU that generate at least 20 net new peak-hour trips (or those within a Precise Plan area) would require completion of a Multi-modal Transportation Analysis (MTA) during the entitlement process. The MTA would ensure that the proposed development conforms with City policies (including traffic calming, neighborhood intrusion, and enhancing publicly accessible bicycle, pedestrian, and transit connections), that adequate multimodal site access and circulation are provided, appropriate fair-share fees are

identified, and that operational improvements support pedestrian, bicycle, and transit quality of service.

Utilities and Service Systems

General concern regarding cumulative impacts to the City's utility systems and payment of fair-share fees were also expressed. The Draft EIR found that with implementation of the HEU, in combination with cumulative development, cumulative impacts related to construction of utility infrastructure, water supply (see also EPC Comment Response 1), wastewater treatment capacity, and solid waste would be less than significant (Draft EIR p. 4.15-23-25).

As discussed in the Draft EIR, the scope of the City's utility master plans includes development anticipated as a result of the City's General Plan land use strategy, and recent certified Environmental Impact Reports and Precise Plans. This development includes General Plan growth estimates, plus growth affiliated with the North Bayshore, El Camino Real, East Whisman and San Antonio Precise Plans and approved recent Rezoning and General Plan Amendment projects, as these all have associated utility impact studies. As such, utility infrastructure and improvements as part of HEU for pipeline projects and opportunity sites that do not require rezoning would be included in the scope of the City's utility master plans. However, development potential at the housing sites identified in the HEU for rezoning were not included in these projections. The City is currently preparing utilities studies for the water, sewer, and stormwater drainage systems for the areas proposed for rezoning to identify needed improvements, provide cost estimates associated with the needed improvements, establish funding mechanism(s), and/or incorporate into the City's Capital Improvement Program (CIP). To ensure that subsequent development projects contribute their fair share toward CIPs identified by the City, based on the project's determined contribution, Mitigation Measure UTL-1, Fair-Share Contributions Toward Utility Improvements, was identified (Draft EIR p. 4.15-16). Additionally, the City is currently updating its Water and Sewer Master Plans, which will identify and prioritize utility needs in the City and will help determine the level of investment needed over the next 10 years.

However, it is important to clarify that the impact under CEQA for utilities infrastructure is if implementation of the HEU would require or result in the relocation or construction of new or expanded utility infrastructure, the construction or relocation of which could cause significant environmental effects. The Draft EIR found that overall, the potential improvements or extension of utility infrastructure to serve development as a result of the HEU would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this Draft EIR for overall construction activity for the project. As such, the implementation of the HEU would not require or result in the relocation or construction of new or expanded utility infrastructure, such that significant environmental effects would occur. As such Program-level and cumulative impacts were found to be less than significant.

EPC Comment Response 4: Groundwater

Comments included concern over the treatment of groundwater as a resource for City water supply differing throughout the Draft EIR, specifically in Section 4.9, *Hydrology and Water Quality*, which was alleged to not include groundwater as a source of water supply for the City, and Section 4.15, *Utilities and Service Systems*, where the use of groundwater is acknowledged.

Contrary to the comment, Section 4.9 of the Draft EIR, contains information about the City's water supply that includes the usage of water from groundwater supply wells (see Draft EIR p. 4.9-2-3) and the discussion under Impact HYD-2 includes information that while the City of Mountain View does not rely primarily on groundwater for its water supply, groundwater is used as a source for dry year supply (Draft EIR p. 4.9-19-20).

EPC Comment Response 5: No Project Alternative

Comments also included a question about the implications of not approving the proposed HEU. Chapter 5, *Alternatives to the Project*, identifies the consequences of not adopting a housing element that is not compliant with State law. This alternative is analyzed consistent with Section 15126.6(e) of the CEQA Guidelines, which state that the No Project Alternative must include the assumption that conditions at the time the NOP of an EIR was circulated for public review would not be changed because the Project would not be implemented, as well as the events or actions that would reasonably be expected to occur in the foreseeable future if the Project were not approved.

The Draft EIR described that the No Project Alternative would also introduce a new significant and unavoidable impact related to land use and planning. The No Project Alternative would not meet any of the objectives of the HEU, nor is it legally feasible to implement. The No Project Alternative would not provide housing to fulfill the requirements of State law or meet the City's RHNA requirements, which result in a significant and unavoidable land use and planning impact, as compared to the less-than-significant impacts associated with the proposed HEU and the Reduced Sites Alternative (Draft EIR pp. 5-18 – 5-19).

EPC Comment Response 6: Electric Vehicle (EV) Charging

Comments also included questions about the amount of required EV charging spaces and the desire for additional EV charging in general beyond 10% of spaces. EV charging requirements were discussed in Draft EIR Section 4.7, *Greenhouse Gas Emissions*. As discussed in Section 4.7, the City's Reach Codes require multifamily residential buildings with more than three dwelling units to have at least 15% of the parking spaces to be installed with Level 2 EV chargers and a Level 3/DV Fast charger for every 100 spaces. The remaining parking spaces are required to be EV Ready.

EPC Comment Response 7: Project Description

A number of comments requested clarification for items in Draft EIR Chapter 3, *Project Description*.

A comment was made specific to the HEU program related to housing on religious sites and whether this program was included in the analysis as a “back-pocket” site or program and how these were all addressed in the Draft EIR. As discussed in Chapter 3, the “Project” analyzed in the Draft EIR includes adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City’s General Plan. This includes potential impacts related to implementation of all HEU policies and programs, as well as housing sites included in the housing inventory. Draft EIR Chapter 5, explains that non-historic churches and other private non-profit institutions in residential (R) zoning districts were not included in the housing sites inventory. However, City staff has included a program in the Housing Plan (1.2 Community Sites for Housing) to evaluate changes to the City Code to allow for affordable residential uses on these sites to respond to Council interest in reviewing such sites.

Comments also requested clarification on the retail replacement provisions that would be applied in the updates to the zoning code as a result of the HEU. The following has been added to the Project Description in response to this comment on p. 3-14 of the Draft EIR (new text is underlined):

- Projects must provide ~~minimum~~ retail or similar neighborhood-serving uses, at a minimum, an amount to replace the existing commercial floor area or determined by an analysis of typical amounts of such uses in the underlying zone.

There was also a comment requesting to add specificity to the rezoning language in the Project Description related to parks. The following change was made in response to this comment in Chapter 3 of the Draft EIR on p. 3-14 (new text is underlined):

At least one public gathering/open space/plaza shall be provided, with a minimum area to be determined based on site size. Provide potential exemptions to one or more standards to facilitate provision of open space to maintain residential density with the goal of addressing neighborhood open space needs.

CHAPTER 4

Errata to the Draft EIR

4.0 Introduction

This chapter describes changes made to the Draft EIR in response to comments received on the Draft EIR. The changes shown in this chapter update, refine, clarify, and amplify Project information and analyses presented in the Draft EIR.

4.1 Text Changes to the Draft EIR

This section summarizes text changes made to the Draft EIR either in response to a comment, initiated by City staff, or in response to a modification to the proposed HEU. New text is indicated in underline and text to be deleted is reflected by a ~~strike through~~. Text changes (including changes to tables and figures in the Draft EIR) are presented in the page order in which they appear in the Draft EIR.

As indicated in Chapter 1, *Introduction*, the entirety of the HEU Final EIR consists of the Draft EIR, together with this Response to Comments document, including all appendices. Therefore, the Draft EIR changes presented in this chapter are incorporated in and supersede corresponding original text in the Draft EIR.

4.2 Implication of Changes to the Draft EIR

Under CEQA, recirculation of all or part of an EIR is required if significant new information is added after public review and prior to certification. According to State CEQA Guidelines Section 15088.5(a), new information is not considered significant “unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.” More specifically, as discussed in Chapter 1, *Introduction*, of this document, pursuant to CEQA Guidelines Section 15088.5(a), recirculation of a Draft EIR is required only if:

- “1) a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
- 2) a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;

- 3) a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it; or
- 4) the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”

None of the changes to the Draft EIR identified in this document meet any of the above conditions. Therefore, recirculation of any part of the Draft EIR is not required. The information presented in the Draft EIR and this document support this determination by the City.

4.3 Changes to Chapter 3: Project Description

1. Based on updates to the Project (see Chapter 2 of this FEIR), the following text has been revised on p. 3-7 of the Draft EIR:

The HEU is required to identify housing sites to meet the City’s RHNA at specified levels of affordability. HCD recommends that jurisdictions plan for their RHNA *plus* a buffer of additional units equivalent to 15-30 percent. To be conservative, the City intends to identify a buffer of at least ~~20~~15 to 30 percent of units at all income levels and a total unit capacity of up to approximately ~~15,000~~18,000 units.

2. Based on updates to the Project (see Chapter 2 of this FEIR), the following text has been revised on p. 3-9 of the Draft EIR:

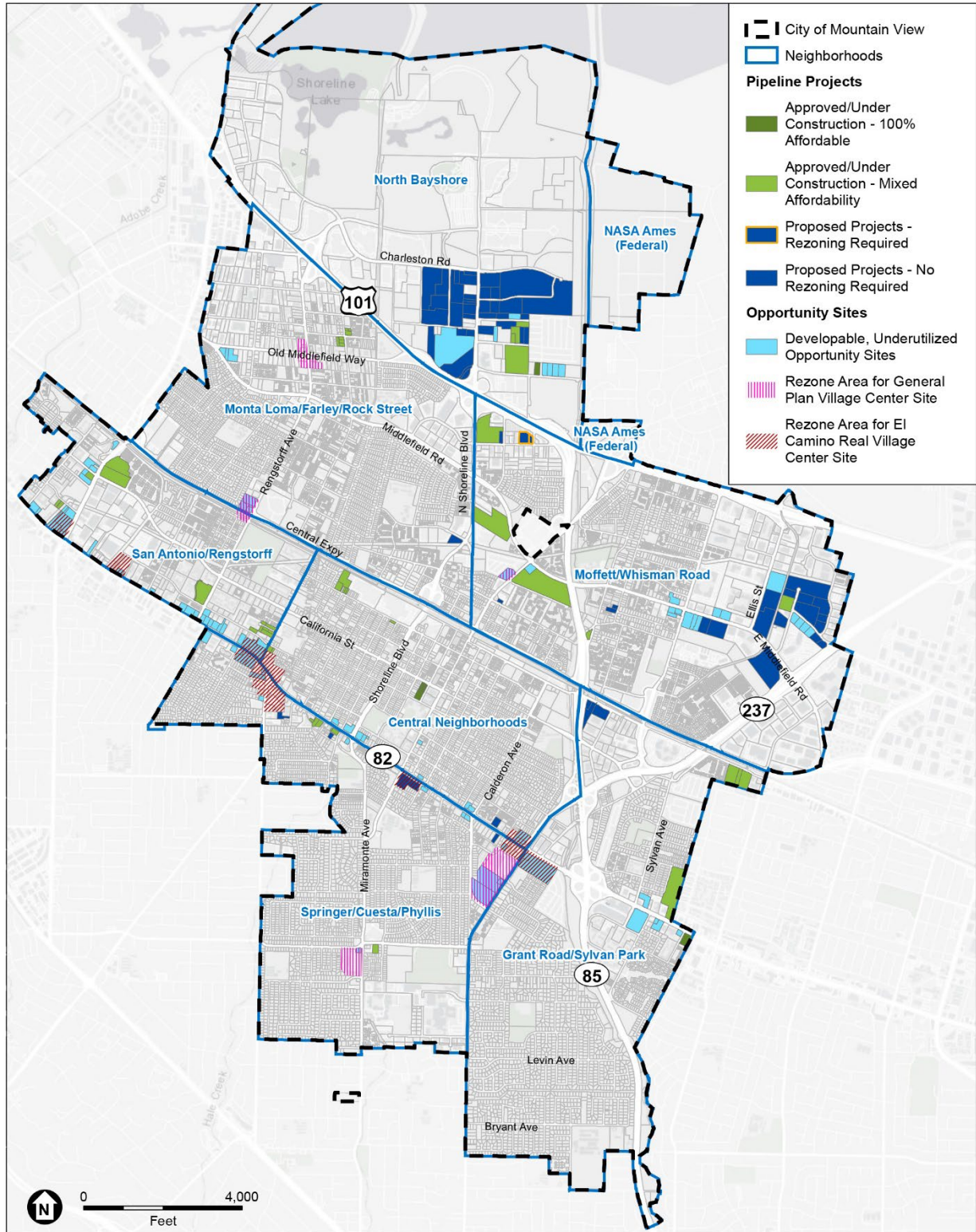
Existing Zoning and General Plan Capacity

Pipeline Projects. The City has approved a number of housing and mixed-use projects that are likely to result in production of multifamily housing during the housing element planning period. The City also has active applications on file for single family and multifamily housing and/or mixed use developments that may be approved, constructed, and occupied during the housing element planning period. These types of “pipeline projects” would count towards the City’s RHNA, and could collectively total at least ~~8,600~~11,418 units by 2031, not including pipeline rezoning projects (described below).

Accessory Dwelling Units. The City may assume that the development of accessory dwelling units (ADUs) during the planning period is equivalent to that in recent years. Based on information contained in the City’s annual production reports to HCD, approximately 96 ADUs are assumed over the eight year planning period.

Existing Opportunity Sites. The City’s existing precise plans, General Plan Land Use designations, and zoning permit a range of residential densities in different areas of the City that can accommodate development of multifamily housing without adjustment. A preliminary analysis estimates that there may be sufficient sites to accommodate approximately 4,7006,265 units. Most of these sites are within Precise Plan areas, including El Camino Real, San Antonio, North Bayshore, Grant-Phyllis, and East Whisman, although there are sites identified for inclusion in the inventory in other areas of the City as well. See Figure 3-2 for a map showing City neighborhoods and precise plan locations.

3. Draft EIR Figure 3-3 on p. 3-10 has been revised to reflect changes to the Housing Sites Inventory since publication of the Draft EIR:



SOURCE: ESRI, 2022



City of Mountain View Housing Element Update

Figure 3-3
Housing Site Locations Overview

4. Based on updates to the Project (see Chapter 2 of this FEIR), the following text has been revised on p. 3-11 of the Draft EIR:

General Plan, Zoning and Precise Plan Amendments

Pipeline Sites Requiring Rezoning and General Plan Amendment. There are a limited number of sites that could accommodate multifamily housing – and in some cases specifically affordable housing for lower income households – if rezoned to allow residential use at appropriate densities. These sites, which include development projects under review and under discussion are located at, 1265 Montecito Avenue, 1020 Terra Bella Avenue, 1010 Linda Vista Avenue and East Evelyn Avenue between Highway 85 and Pioneer Way, and could accommodate approximately 580 units.

Rezoning Adopted with the Housing Element. The City proposes to adopt Zoning and Precise Plan Amendments concurrent with this Housing Element Update, to clarify standards for allowed uses and densities at General Plan Village Centers and El Camino Real Village Centers. These amendments accommodate approximately ~~800~~664 units in the site inventory, but the total additional capacity of these areas is greater – approximately 2,500units¹.

Opportunity Sites Requiring Rezoning and/or General Plan Amendments ("Back-Pocket" Areas). In the event that the above opportunities are inadequate to accommodate the RHNA, either at the time of Housing Element adoption or over the course of the 6th Cycle due to the “no net loss” law, the proposed Housing Element will also include programs to adopt additional rezonings and General Plan amendments in targeted urban infill areas (areas on previously developed sites and/or completely surrounded by urban uses):

- Moffett Boulevard
- Other shopping areas, such as Leong Drive, Bailey Park shopping center, Monta Loma Plaza
- A Joint Development at the Mountain View Transit Center
- Other non-residential sites south of El Camino Real, such as 1949 Grant Road and offices near Blossom Valley Shopping Center

These rezoning opportunities could accommodate approximately 1,000 additional units, depending on the densities adopted.

Total Inventory. This EIR analyzes the impacts associated with the site inventory to 2031, an increase in approximately ~~15,000~~17,779 dwelling units, focused primarily along the commercial corridors and in areas that currently

¹ This number is less than the total amount of units that could be allowed across these sites, since it is unreasonable to assume replacement of all existing uses over the horizon of this study. The number does consider the sites most likely to be redeveloped.

accommodate commercial/industrial uses, mixed uses, and/or multifamily housing.² Of this, approximately ~~13,600~~16,530 units³ are already allowed under the City's adopted General Plan, zoning, and Precise Plans and the remaining ~~1,400~~ 1,250 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately ~~2,700~~ 2,850 units beyond 2031 (described in detail above). More information is provided in Section 3.4.3 below.

5. Based on updates to the Project (see Chapter 2 of this FEIR), the following text has been revised on p. 3-12 of the Draft EIR:⁴

The HEU is planning for the period from January 31, 2023 through January 31, 2031, and is expected to plan for approximately ~~15,000~~18,000 new housing units within this period, although the actual pace of development will depend on market conditions, property owner interest, and other factors. Also, of the approximately ~~15,000~~18,000 new units, only a small percentage would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. However, development of these units may be accelerated compared to the theoretical No Project scenario, due to programs in the Housing Element that streamline, incentivize or remove constraints for housing.

6. Based on updates to the Project (see Chapter 2 of this FEIR), the Table 3-2 has been revised on p. 3-13 of the Draft EIR:

² The actual site inventory in the current draft is closer to ~~14,800~~17,779. However, ~~15,000~~18,000 is a conservatively large round number and small changes to the site inventory are expected up to adoption, based on newly submitted applications.

³ Approximately 13,400 units in the current draft. See previous footnote.

⁴ Note that descriptions referencing 15,000 units in the technical topic sections of the Draft EIR have not been revised to reduce the volume of this chapter and FEIR, as they are typically for descriptive purposes only and revision would not meaningfully affect the analysis or conclusions of the Draft EIR.

**TABLE 3-2
MOUNTAIN VIEW GROWTH PROJECTIONS FOR 2040**

	Existing Baseline (2020)	Under Construction	Proposed HEU (2021-2031) ²	2031 Conditions with Proposed HEU	Cumulative Growth no HEU	HEU Contribution to Cumulative Growth ³	Cumulative Growth with HEU
Dwelling Units	37,820	4,847	45,000 18,000	54,700 56,000	63,000 66,000	4,100	67,100 70,100
Population ¹	82,826	3,740	30,000 36,000	146,600 119,000	134,000 140,000	8,200	142,200 148,200
Jobs	101,965	8,800	0 ²	120,000	133,000	0 ²	133,000

NOTES:

¹ Assumes an average of 2 persons per housing unit, based on the City's projections.

² Job growth is considered as background and is not part of the proposed HEU

³ Includes the Project's contribution due to Rezoning and General Plan Amendments considered as part of the HEU.

⁴ Many of the units under construction are included in the 18,000 unit count.

SOURCE: City of Mountain View, March/November 2022.

7. In response to verbal comments raised at the Environmental Planning Commission (EPC) public hearing on the Draft EIR, the following text has been added on p. 3-14 of the Draft EIR:

- At least one public gathering/open space/plaza shall be provided, with a minimum area to be determined based on site size. Provide potential exemptions to one or more standards to facilitate provision of open space to maintain residential density with the goal of addressing neighborhood open space needs.

8. In response to verbal comments raised at the EPC public hearing on the Draft, the following text has been added on p. 3-14 of the Draft EIR:

- Projects must provide ~~minimum~~ retail or similar neighborhood-serving uses, at a minimum, an amount to replace the existing commercial floor area or determined by an analysis of typical amounts of such uses in the underlying zone.

4.4 Changes to Section 4.4: Cultural and Tribal Cultural Resources

1. In order to update the intent of General Plan Action LUD 11.5.1 to the current data sources and procedures pertaining to cultural resources, Mitigation Measure CUL-2b has been revised to require a non-confidential records search from the NWIC. This search will document if there are previously recorded resources within or adjacent to the proposed project site and provide recommendations to the City as to whether a cultural resources study should be conducted to assess previously recorded resources and/or determine if there is archaeological sensitivity for unknown cultural resources in the proposed project area. The revisions to this mitigation measure do not affect or alter the analysis of impacts or conclusions identified in the Draft EIR.

The following text has been revised on pp. 4.4-23 of the Draft EIR:

To address this potentially significant impact, **Mitigation Measure CUL-2a, Inadvertent Discovery of Cultural Resources** revises the Discovery of Archaeological Resources Standard Condition to require a stop-work boundary around cultural material finds and establish protocol for avoidance or preservation in place of significant cultural resources, and **Mitigation Measure CUL-2b, Cultural Resources Study Requirements** establishes a requirement for a cultural resource study for all multifamily housing projects that require ground disturbance ~~and are located within 0.25 mile of known cultural resources~~ based upon review of ~~the most recent and updated~~ a NWIC non-confidential records search of the proposed project site list, consistent with General Plan Action LUD 11.5.1. These mitigation measures would address potential impacts to archaeological resources and reduce the potential of the HEU to impact archaeological resources to a less-than-significant level.

In accordance with the changes noted above, the following text has been revised on pp. 4.4-24-25 of the Draft EIR:

Mitigation Measure CUL-2b: Cultural Resources Study Requirements.

Prior to approval of development permits for multifamily projects that include ground-disturbing activities, ~~City staff~~ individual project applicants shall ~~review the most recent and updated~~ request a non-confidential records search from the Northwest Information Center (NWIC) list: Historic Property Directory for the County of Santa Clara, to determine if ~~known archaeological sites underlie the proposed project site~~ has archaeological sensitivity. If the NWIC recommends that the proposed project site be reviewed by an archaeologist, it is determined that known cultural resources are within 0.25 mile of the project site, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior's Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources

Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.

4.5 Changes to Section 4.8: Hazards and Hazardous Materials

1. In response to Comment A-3-3, the following text has been added on p. 4.8-6 of the Draft EIR:

Proximity to Schools

The following public schools are located in Mountain View:

- Stevenson Elementary School at 750 San Pierre Way
- Theuerkauf Elementary School at 1625 San Luis Avenue
- ~~Waldorf School of the Peninsula at 180 North Rengstorff Avenue~~
- Landels Elementary School at 115 West Dana Street
- Mariano Castro Elementary School at 500 Toft Street
- ~~St. Joseph Mountain View at 1120 Miramonte Avenue~~
- Monta Loma Elementary at 460 Thompson Avenue
- Springer Elementary School at 1120 Rose Avenue
- Benjamin Bubb Elementary School at 525 Hans Avenue

- Amy Imai Elementary School (previously Huff) at 253 Martens Avenue
- Mountain View High School at 3535 Truman Avenue
- Alta Vista High School at 1325 Bryant Avenue
- Vargas Elementary School at 220 N Whisman Road
- Mistral Elementary School at 505 Escuela Avenue
- Graham Middle School at 1175 Castro Street
- Crittenden Middle School at 1701 Rock Street

A number of private schools including Waldorf School of the Peninsula (180 North Rengstorff Avenue), St. Joseph Mountain View (1120 Miramonte Avenue), St. Francis High School (1885 Miramonte Avenue), German International School of Silicon Valley (310 Easy Street), Mountain View Academy (360 S Shoreline Blvd), St. Stephen Lutheran School (320 Moorpark Way), and Khan Lab School (1200 Villa Street) are also located in the City. There is also a proposed new school site for the Los Altos School District located at the corner of California Street and Showers Drive.

2. Also in response to Comment A-3-3, the following text has been revised on p. 4.8-22 of the Draft EIR:

As discussed in Section 4.8.2, *Environmental Setting, Proximity to Schools*, there are ~~ten~~ 14 public schools and a number of private schools located within Mountain View. The accidental release or spill of hazardous materials transported through the vicinity near schools could expose school children and staff to hazardous materials.

4.6 Changes to Section 4.13: Public Services and Recreation

1. The following information has been corrected on page 4.13-1 of the Draft EIR based on input from the Mountain View Fire Department. These editorial changes do not affect or alter the analysis of impacts or conclusions identified in the Draft EIR.

Mountain View Fire Department

The Mountain View Fire Department (MVFD) exists to save lives and property, protect the environment, and minimize the risk of fire and natural disaster. The MVFD has a fire prevention division and environmental division which aim to ~~prevent~~ prevent fires and injuries and limit the effects of fires and accidents. The Environmental Safety Section of the Fire Department implements State mandated water pollution control programs to minimize pollutant discharges into Mountain View creeks and the Bay. The MVFD has a multi-family inspection program to ensure proper maintenance of multi-family housing. MVFD firefighters are often the first responders and provide valuable services to the City including fire

suppression, emergency medical treatment, technical rescue services, and response to hazardous materials releases (City of Mountain View, 2022a).

MVFD currently maintains 5 fire stations throughout the City. The MVFD fleet includes ~~seven~~ five type 1 engines (two additional type engines are reserve units), one rescue, one Haz Mat vehicle, and one aerial ladder truck (one additional aerial ladder truck as a reserve unit shared with the City of Palo Alto Fire Department) (City of Mountain View, 2022a). Station 1, located at 251 South Shoreline Boulevard, has an engine company, aerial ladder truck company, rescue company, and a battalion chief. Station 2, located at 160 Cuesta Drive, has ~~two~~ one engine company ~~ies~~ ies and a second 4x4 unit type 6 engine stored. Station 3, located at 301 North Rengstorff Avenue, has ~~two~~ one engine company ~~ies~~ ies. A second engine is stored ~~one of~~ which is a California Office of Emergency Services (Cal OES) company. Station 4, located at 229 North Whisman Road, has ~~three~~ one type 1 engine 11 companies (two additional engines are stored here as of which are reserves units), one reserve battalion chief, and one utility ~~company~~ pickup truck stored. Station 5, located at 2195 North Shoreline Boulevard, has an engine company, hazmat ~~company~~ unit stored, an aerial ladder truck company (reserve stored), and a utility terrain vehicle stored. All the stations have 3 members staff per shift, except for Station 1 which has 9 staff per shift (MVFD, 2021).

In 2021-2022, the MVFD had a total of 10,406 unit responses, which included 489 unit responses for fire-related call and 7,288 unit responses for rescue and EMS-related calls (MVFD, 2022). The MVFD ~~regularly~~ frequently achieves its goal of responding to each emergency call within ~~six~~ four minutes of dispatched time (City of Mountain View, 2021).

2. The following setting information on page 4.13-2 of the Draft EIR has been corrected based on input from the Mountain View Police Department. This editorial change does not affect or alter the analysis of impacts or conclusions identified in the Draft EIR.

Mountain View Police Department

The Mountain View Police Department (MVPD) provides police services in the City of Mountain View. Services include crime suppression, investigation, traffic enforcement, youth services, community education, neighborhood and event services, and a K-9 patrol. In 2020, the MVFD employed 181 full (143 full-time), regular, and limited period positions to serve the City population of 82,739. The ~~MVFD~~ MVPD has 1 police chief and ~~1~~ deputy police chief; the rest of the staffing falls into the categories of administration, field operations, special operations, or public safety support services. In 2020, the MVPD had 3 K9 teams (MVPD, 2020). There is one police station in the City, located at 1000 Villa Street (City of Mountain View, 2022b).

- The following information has been added to the setting section on page 4.13-3 of the Draft EIR related to public schools and parks. This editorial change does not affect or alter the analysis of impacts or conclusions identified in the Draft EIR.

Los Altos School District

The LASD operates nine schools serving the communities of Los Altos, Mountain View, Palo Alto, Los Altos Hills and unincorporated areas. There are seven elementary (K to 6th Grade) and two intermediate schools (grades 7 to 8). District-wide enrollment during the 2021 to 2022 school year was 3,576 students (CDE, 2022c). The only LASD school located in Mountain View is Springer Elementary. Total enrollment at Springer Elementary during the 2021 to 2022 school year was 346 students in grades K-6 (CDE, 2022d). Additionally, there is also a proposed new school site for the LASD located in the City at the corner of California Street and Showers Drive, with a City park adjacent.

- The following changes have been made on page 4.13-13 of the Draft EIR based on input from the Mountain View Fire Department. These editorial changes do not affect or alter the analysis of impacts or conclusions identified in the Draft EIR.

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increase in demand for fire protection and emergency medical response services from the MVFD. As discussed in Section 4.13.2, the MVFD ~~regularly~~ frequently (FY 21-22 the goal of arriving in 4 minutes was met 42% of the time) achieves its goal of responding to each emergency call within ~~64~~ of being dispatched minutes. The MVFD target response time of ~~64~~ minutes is more stringent than the NFPA 1710 Standard, which stipulates that the first fire engine should arrive to 90 percent of emergency calls within a range of 6:15 and 6:45 minutes. It is likely that the increase in population as a result of HEU will affect current response times. Travel time performance by region is variable and influenced by factors such as individual response unit workload, the size of the station, and the street system serving it.

4.7 Changes to Section 4.14: Transportation

- In response to Comment A-1-6, the following footnote has been added to the bottom of p. 4.14-24 of the Draft EIR:

¹ Some of the measures may primarily apply to employment projects or have studies supporting the VMT reductions that only provide evidence for employment projects. These measures are included for consideration for mixed-use residential projects.

APPENDIX A

Mitigation Monitoring and Reporting Program

Purpose of this Document

This chapter contains the Mitigation Monitoring and Reporting Program (MMRP) prepared in compliance with Public Resources Code Section 21081.6(a). The MMRP will be considered for adoption by the Environmental Planning Commission (EPC) and/or the City Council and will aid the City in its implementation and monitoring of measures included in the EIR and adopted by the EPC and/or City Council.

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM**

	Implemented By	When Implemented	Monitored By	Verified By
Air Quality				
<p>Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.</p> <p>Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.</p> <p>In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.</p> <p>Clean Construction Equipment.</p> <ol style="list-style-type: none"> 1. The project applicant shall use electric construction equipment when feasible. 2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement must state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract. <p>The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.</p> <ol style="list-style-type: none"> 3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit. 	Project applicant	During construction	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Operational Emission Reductions</p> <ol style="list-style-type: none"> Projects shall be constructed without natural gas infrastructure and shall be “all electric.” As required by Mitigation Measure GHG-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time. Project applicants that do not screen out from VMT impact analysis shall implement VMT reduction measures as required by Mitigation Measure TRA-1. 				
<p>Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.</p> <p>Project applicants within the HEU area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD’s health risk significance thresholds for projects.</p> <p>In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AIR-1’s requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less-than-significant level. In addition, all tower cranes, forklifts, man- and material- lifts shall be electric powered.</p>	Project applicant	Prior to construction	Community Development Department	Community Development Department
Biological Resources				
<p>Mitigation Measure BIO-1: Special-Status Bat Protection Measures.</p> <p>In coordination with the City, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the subsequent project sites to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:</p> <ul style="list-style-type: none"> Removal of trees shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 16 – August 14) and outside the months of winter torpor (approximately October 16 – February 28), to the extent feasible. If removal of trees during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and building removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by a qualified biologist. A 100-foot no-disturbance buffer is a typical protective buffer distance; however, this may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation) as well as the type of construction activity which would occur around the roost site. The qualified biologist shall be present during tree removal if potential bat roosting habitat or active bat roosts are present. Trees with active roosts shall only be removed when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F. 	Qualified project staff biologist	Prior to construction	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<ul style="list-style-type: none"> • Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process: <ul style="list-style-type: none"> - On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. - On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). 				
Cultural Resources and Tribal Cultural Resources				
<p>Mitigation Measure CUL 1a: Historic Resource Evaluation.</p> <p>Prior to issuance of a demolition permit for any previously unevaluated building 45-years of age or older on a site included in the housing sites inventory, the City shall require an evaluation of historical significance that includes consideration of the criteria for listing in the National Register of Historic Places, the California Register of Historical Resources, and the Mountain View Register of Historic Resources. This evaluation shall be completed by a professional who meets the Secretary of the Interior’s Professional Qualifications for History, Architecture, Architectural History, or Historic Architecture.</p> <p>In accordance with Section 5024.1, if the building has been previously evaluated for eligibility as a historic resource under CEQA and that evaluation or survey is more than five-years old, the findings of that evaluation should be confirmed by a professional who meets the Secretary of the Interior’s Professional Qualifications as stated above.</p>	Qualified project staff professional	Prior to demolition permit issuance	Community Development Department	Community Development Department
<p>Mitigation Measure CUL 1b: Historic Resource Avoidance.</p> <p>If, after implementation of Mitigation Measure CUL 1a, the subject property is found to qualify as a historic resource and the proposed project includes demolition of the historic resource, the project shall be redesigned to remove or avoid demolition. Any redesign that includes significant alteration of the historic resource, as defined by Section 36.54.55(e) of the City of Mountain View Zoning Code, shall be required to comply with City Standard Condition of Approval (Secretary of the Interior Standards).</p>	Qualified project staff professional	Prior to demolition permit issuance	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources.</p> <p>If pre-contact or historic-era archaeological resources are encountered during project construction and implementation, all construction activities within 100 feet shall halt and the City shall be notified. Pre-contact 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology shall inspect the findings within 24 hours of discovery.</p> <p>If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4, with a preference for preservation in place. If preservation in place is feasible, this may be accomplished through one of the following means: (1) siting improvements to completely avoid the archaeological resource; (2) incorporating the resource into a park or dedicated open space, by deeding the resource into a permanent conservation easement; (3) capping and covering the resource before building the project on the resource site after the resource has been thoroughly studied by a SOIS qualified archaeologist and a report written on the findings.</p> <p>If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).</p>	<p>Construction contractors, City staff, Qualified archaeologist</p>	<p>During project construction</p>	<p>Community Development Department</p>	<p>Community Development Department</p>

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Mitigation Measure CUL 2b: Cultural Resources Study Requirements.</p> <p>Prior to approval of development permits for multifamily projects that include ground-disturbing activities, individual project applicants shall request a non-confidential records search from the Northwest Information Center (NWIC) to determine if the proposed project site has archaeological sensitivity. If the NWIC recommends that the proposed project site be reviewed by an archaeologist, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.</p>	City staff, Qualified archaeologist	Prior to approval of development permits for multifamily projects that include ground-disturbing activities	Community Development Department	Community Development Department
Greenhouse Gas Emissions				
<p>Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2.</p> <p>Subsequent development projects proposed as part of the HEU shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.</p>	Project sponsor	When building permit application is filed	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
Hazards and Hazardous Materials				
<p>Mitigation Measure HAZ-1: Phase I Environmental Site Assessment.</p> <p>Prior to the initiation of any construction requiring ground-disturbing activities on listed active hazardous materials cleanup sites, the project applicant shall complete a Phase I environmental site assessment for that property in accordance with American Society for Testing and Materials Standard E1527 for those active hazardous materials sites to ascertain their current status. Any recommended follow up sampling (i.e., Phase II activities) set forth in the Phase I assessment shall be implemented prior to construction. The results of Phase II studies, if necessary, shall be submitted to the local overseeing agency and any required remediation or further delineation of identified contamination shall be completed prior to commencement of construction.</p> <p>Prior to final project design of any individual project that includes any earth-disturbing activities, the project applicant shall conduct a Phase I Environmental Site Assessment (Phase I assessment). The Phase I assessment shall be prepared in general accordance with ASTM Standard E1527-21, Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process (or most current edition that is in force at the time of final project design), which is the current industry standard. The Phase I assessment shall include a records review of appropriate federal, State, and local databases within ASTM-listed search distances regarding hazardous materials use, storage, or disposal at the given site, a review of historical topographic maps and aerial photographs, a site reconnaissance, interviews with persons knowledgeable about the sites historical uses, and review of other relevant existing information that could identify the potential existence of Recognized Environmental Conditions, including hazardous materials, or contaminated soil or groundwater. If no Recognized Environmental Conditions are identified, then no further action would be required.</p> <p>If Recognized Environmental Conditions are identified and the Phase I assessment recommends further action, the project applicant shall conduct the appropriate follow-up actions, which may include further records review, sampling of potentially hazardous materials, and possibly site cleanup. In the event that site cleanup is required, the project shall not proceed until the site has been cleaned up to the satisfaction of the appropriate regulatory agency (e.g., DTSC, RWQCB, or SCCEHD) such that the regulatory agency issues a No Further Action letter or equivalent.</p>	Project applicant	Prior to final project design and initiation of any construction requiring ground-disturbing activities	Oversight by the City's Community Development Department, DTSC, RWQCB, and/or SCCEHD	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
Transportation				
<p>Mitigation Measure TRA-1: Implement Vehicle Miles Traveled (VMT) Reduction Measures. Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the Santa Clara Valley Transportation Authority (VTA) VMT tool:</p> <ul style="list-style-type: none"> • Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT. • Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City's approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.) • Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs. • Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools. 	Consultants and City Staff	During environmental review	Community Development Department and Public Works Department	Community Development Department and Public Works Department
Utilities and Service Systems				
<p>Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements. Subsequent development projects shall contribute the fair share amount identified by the City of Mountain View Public Works Department to fund capital improvements to the water, sanitary sewer, and stormwater drainage systems prior to issuance of a building permit.</p>	Project applicant	Prior to building permit issuance	Community Development Department and Public Works Department	Community Development Department and Public Works Department

CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE

Draft Environmental Impact Report
SCH# 2022020129

Prepared by

July 2022



In conjunction with



CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE

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July 2022



City of
Mountain View

In conjunction with



787 The Alameda
Suite 250
San Jose, CA 95126
408.660.4000
esassoc.com



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TABLE OF CONTENTS

City of Mountain View Housing Element Update

	<u>Page</u>
Chapter 1, Introduction	1-1
1.1 Project Overview.....	1-1
1.2 Purpose and Use of this EIR	1-2
1.3 This is a Program EIR.....	1-2
1.4 Environmental Review Process	1-3
1.5 Organization of the Draft EIR.....	1-4
Chapter 2, Summary	2-1
2.1 Project Summary	2-1
2.2 Project Summary	2-2
2.3 Environmental Impacts and Mitigation Measures	2-7
2.4 Summary of Alternatives.....	2-7
2.5 Areas of Controversy Raised in Scoping Comments.....	2-7
2.6 Issues to Be Resolved	2-8
Chapter 3, Project Description	3-1
3.1 Introduction	3-1
3.2 Project Location and Setting.....	3-2
3.3 Background	3-2
3.4 Project Description.....	3-8
3.5 Project Objectives.....	3-15
3.6 Intended Uses of this EIR	3-15
3.7 References	3-17
Chapter 4, Environmental Setting, Impacts, and Mitigation Measures	4.0-1
4.0 Introduction to the Environmental Analysis	4.0-1
4.1 Aesthetics	4.1-1
4.2 Air Quality	4.2-1
4.3 Biological Resources	4.3-1
4.4 Cultural Resources and Tribal Cultural Resources	4.4-1
4.5 Energy	4.5-1
4.6 Geology, Soils, and Paleontological Resources	4.6-1
4.7 Greenhouse Gas Emissions	4.7-1
4.8 Hazards and Hazardous Materials.....	4.8-1
4.9 Hydrology and Water Quality	4.9-1
4.10 Land Use and Planning	4.10-1
4.11 Noise and Vibration	4.11-1
4.12 Population and Housing.....	4.12-1
4.13 Public Services and Recreation	4.13-1
4.14 Transportation	4.14-1

	<u>Page</u>
4.15 Utilities and Service Systems	4.15-1
4.16 Effects Found Not to Be Significant	4.16-1
Chapter 5, Alternatives to the Project	5-1
5.1 CEQA Requirements	5-1
5.2 Factors in the Selection of Alternatives.....	5-3
5.3 Description of Alternatives Selected for Analysis.....	5-5
5.4 Comparative Analysis of the Alternatives	5-7
5.5 Overall Comparison of the Alternatives	5-15
Chapter 6, Other CEQA Considerations.....	6-1
6.1 Significant Environmental Effects	6-1
6.2 Significant Irreversible Environmental Changes	6-1
6.3 Growth-Inducing Impacts.....	6-2
6.4 Cumulative Impacts	6-5
Chapter 7, Report Preparers	7-1
7.1 Lead Agency.....	7-1
7.2 EIR Consultants.....	7-1

Appendices

A. Notice of Preparation, Scoping Materials, and Scoping Comment Letters	A-1
B. Draft City of Mountain View 2023-2031 Housing Element	B-1
C. Noise Supporting Information	C-1
D. Water Supply Assessment.....	D-1

List of Figures

Figure 3-1 Project Location Map.....	3-3
Figure 3-2 Neighborhoods and Precise Plan Locations	3-5
Figure 3-3 Housing Site Locations Overview	3-10
Figure 4.8-1 Hazardous Materials Cleanup Sites	4.8-3
Figure 4.8-2 FAR Part 77 Surface	4.8-7
Figure 4.11-1 2022 Noise Contours for Moffett Federal Airfield.....	4.11-16
Figure 4.14-1 Roadway Classifications.....	4.14-2
Figure 4.14-2 Existing Bicycle Facilities.....	4.14-4
Figure 4.14-3 Existing Transit Services	4.14-6
Figure 4.14-4 HEU Housing Sites and VMT Per Capita	4.14-21

List of Tables

Table 2-1 Mountain View Regional Housing Needs Allocation 6 th Housing Element Cycle (2023-2031)	2-3
Table 2-2 Summary of Impacts and Mitigation Measures for the Project.....	2-9
Table 3-1 Mountain View Regional Housing Needs Allocation 6 th Housing Element Cycle (2023-2031)	3-7
Table 3-2 Mountain View Growth Projections for 2040.....	3-13
Table 4.0-1 2040 Housing and Employment Projections with and without the City of Mountain View HEU	4.0-6

	<u>Page</u>
Table 4.0-2	Cumulative Non-Residential Development Projects in the City 4.0-8
Table 4.2-1	Sources, Environmental and Health Effects of Criteria Air Pollutants 4.2-3
Table 4.2-2	State and Federal Ambient Air Quality Standards 4.2-4
Table 4.2-3	Summary of Ambient Air Quality Data in the Project Area 4.2-7
Table 4.2-4	Air Quality Index Statistics for the SFBAAB 4.2-9
Table 4.2-5	State And National Ambient Air Quality Standards and Major Sources 4.2-11
Table 4.2-6	San Francisco Bay Area Air Basin Attainment Status 4.2-13
Table 4.2-7	Recommendations for Siting New Sensitive Land Uses 4.2-15
Table 4.2-8	Recommendations for Siting New Sensitive Land Uses 4.2-16
Table 4.2-9	Consistency with Potentially Applicable Control Measures in 2017 Clean Air Plan Control Measures 4.2-27
Table 4.2-10	Increase in VMT versus Population Growth 4.2-31
Table 4.3-1	Special-Status Species Potential to Occur in the HEU Study Area 4.3-7
Table 4.4-1	Known Historic Resources 4.4-8
Table 4.4-2	Previously Recorded Archaeological Resources 4.4-10
Table 4.5-1	Existing Annual State and Regional Energy Use 4.5-2
Table 4.7-1	State of California Greenhouse Gas Emissions 4.7-6
Table 4.7-2	City of Mountain View Greenhouse Gas Emissions 4.7-7
Table 4.7-3	Consistency with Applicable GHG Reduction Actions in 2017 Scoping Plan Update 4.7-36
Table 4.8-1	Federal Laws and Regulations Related to Hazardous Materials Management 4.8-8
Table 4.8-2	State Laws and Regulations Related to Hazardous Materials Management 4.8-10
Table 4.8-3	Indoor Air Cleanup Levels for Long-term Exposure for the MEW Site - Residential Buildings 4.8-15
Table 4.9-1	Designated Beneficial Uses for Water Bodies in the Study Area 4.9-8
Table 4.11-1	Sound Levels That Protect Public Health (dBA) 4.11-2
Table 4.11-2	Reference Construction Equipment Noise Levels (50 feet from source) 4.11-10
Table 4.11-3	Vibration Levels for Construction Equipment 4.11-12
Table 4.11-4	Baseline and Projected Peak Hour Traffic Noise Levels Along Streets Housing Element Update 4.11-14
Table 4.12-1	Population Trends, 2010-2020 4.12-1
Table 4.12-2	Housing Trends, 2010-2020 4.12-2
Table 4.12-3	Mountain View Regional Housing Needs Allocation 6 th Housing Element Cycle (2023-2031) 4.12-4
Table 4.13-1	Existing City-Owned Parks 4.13-4
Table 4.14-1	Existing Transit Services 4.14-7
Table 4.14-2	Mountain View Growth Projections 4.14-17
Table 5-1	Alternative Impact Summary and Comparison 5-16

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CHAPTER 1

Introduction

This Draft Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to analyze potential physical environmental impacts of the proposed City of Mountain View Housing Element Update (HEU), referred to in this EIR as “Project”.¹ A brief overview of the Project and the environmental review process, and a description of the purpose of this Draft EIR and opportunities for public comment, are provided below, along with an explanation of how this Draft EIR is organized.

1.1 Project Overview

The Project analyzed in the EIR would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City’s General Plan. The Housing Element itself would contain: an updated housing needs assessment; updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing; and a housing inventory that meets the City’s Regional Housing Needs Assessment (RHNA) allocation and provides a buffer of additional housing development capacity. The Project would also include modifications to provisions in the City’s General Plan Land Use Map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory, as described in Chapter 3, *Project Description*.

Based on the City’s Regional Housing Needs Assessment (RHNA) allocation, the HEU plans for an additional 11,135 dwelling units plus a sizeable “buffer.” This EIR evaluates the potential for approximately 15,000 multi-family housing units (including approximately 96 accessory dwelling units) during the HEU planning period as a maximum scenario for purposes of the CEQA evaluation, understanding that the buffer size and the final sites selected for inclusion in the Housing Element will be determined by the City Council upon adoption of the HEU. Of this, approximately 13,600 units are already allowed under the City’s adopted General Plan, zoning, and Precise Plans and the remaining 1,400 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately 2,700 units beyond 2031.

In addition to the amendments that would take place within the General Plan’s Housing Element, the HEU could require amendments to other elements of the General Plan to ensure internal

¹ The *California Environmental Quality Act* can be found in the California Public Resources Code, Section 21000 et seq. The State CEQA Guidelines, formally known as the *Guidelines for California Environmental Quality Act*, can be found in the California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.

consistency and constancy between the General Plan and zoning/Precise Plans. Please see Chapter 3, *Project Description*, for more information.

1.2 Purpose and Use of this EIR

CEQA requires a public agency to prepare an EIR describing the environmental effects of a project before a public agency can approve a project that may have potentially significant, adverse physical effects on the environment. The EIR is a public information document that identifies and evaluates potential environmental impacts of a project, recommends mitigation measures to lessen or eliminate significant adverse impacts, and examines feasible alternatives to the project. The information contained in the EIR must be reviewed and considered by the City of Mountain View and by any responsible agencies (as defined in CEQA) prior to a decision to approve or modify the project.

1.3 This is a Program EIR

This EIR is a program EIR, as provided for in CEQA Guidelines Section 15168, and consistent with Section 15168(b) of the CEQA Guidelines, allows the City “to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.” As a program EIR, this EIR analyzes potential impacts of development that would be allowed by the HEU without having site-specific development proposals in hand, and broadly considers proposed sites, their environmental setting, and potential impacts that could stem from their development. Readers will note that the level of detail is different than in a project-specific EIR, which generally considers a single, specific proposal on an individual site.

Future discretionary actions that would be facilitated by the HEU’s adoption, such as those related to the development of housing, would be assessed to determine consistency with the analysis provided in this program EIR. Potential future actions would also be subject to the mitigation measures established in this program EIR unless superseded by a subsequent environmental document that is required to analyze significant environmental impacts not foreseen in this program EIR.

It is important to note that while the law requires the HEU to include an inventory of housing sites and requires the City to zone those sites for multifamily housing, the City is not required to actually develop housing on these sites. Future development on identified sites would be at the discretion of individual property owners and would be largely dependent on market forces and -- in the case of affordable housing -- available funding and/or other incentives. Nonetheless, this EIR considers potential impacts of development that may result from adoption of the HEU, focusing on proposed actions to encourage housing production such as changes in allowable densities, changes in development standards, and adoption of incentives.

1.4 Environmental Review Process

1.4.1 Notice of Preparation and EIR Scoping

Pursuant to the requirements of CEQA for the initiation of environmental review, on February 4, 2022, the City sent a Notice of Preparation (NOP) to the State Clearinghouse, responsible and trustee government agencies, organizations, and individuals potentially interested in the Project. The NOP requested that agencies with regulatory authority over any aspect of the Project describe that authority and identify relevant environmental issues that should be addressed in the EIR. Interested members of the public were also invited to comment. The comment period for the NOP extended from February 4, 2022 to March 7, 2022, during which time, the City accepted written comments on the scope of the EIR.² A scoping meeting was held by the City on February 24, 2022 to accept oral comments.

The NOP and the comments received on the NOP are included in **Appendix A** of this EIR. As discussed in the NOP and pursuant to the provisions of CEQA, the City did not prepare a CEQA Initial Study prior to preparation of the EIR, because the City determined that it was clear at the time of the issuance of the NOP that an EIR was required (CEQA Guidelines Section 15060[d]).

1.4.2 Public Review of this Draft EIR

This Draft EIR is available for public review and comment as set forth in the Notice of Availability and Notice of Completion circulated by the City. During the review and comment period, written comments (including email) regarding the Draft EIR may be submitted to the City at the address below.

City of Mountain View
 Community Development Department
 Attention: Ellen Yau, Senior Planner
 500 Castro Street, P.O. Box 7540
 Mountain View, CA 94039-7540
 ellen.yau@mountainview.gov

The Draft EIR, Notice of Availability, and other supporting documents, are available for public review on the City's website at:

www.mountainview.gov/CEQA or on the Project website at:
<https://www.mvhousingelement.org/> and on the State Clearinghouse Website at:
<https://ceqanet.opr.ca.gov/Project/2022020129>.

The City Environmental Planning Commission will hold a public hearing on **Wednesday, August 3, 2022 at 7:00 p.m.**, during which verbal comments on the Draft EIR will be accepted. The meeting will be held virtually via Zoom webinar, and members of the public and public agencies may participate remotely. All interested persons may participate by joining the video conference and may access the meeting information at the following website: **<https://mountainview.legistar.com/Calendar.aspx>**.

² Late comments were also accepted and received through March 14, 2022.

1.4.3 Final EIR

Following the public review and comment period for the Draft EIR, the City will prepare responses that address all substantive written and oral comments on the Draft EIR's environmental analyses that are received within the specified review period. The City will also identify any clarifying revisions to the Draft EIR that are necessary to address the comments received. When taken together, the responses to comments and the Draft EIR (as amended if necessary) will constitute the Final EIR for the project. The City (following a recommendation by the City's Environmental Planning Commission) will consider certification of the Final EIR prior to making a decision on adoption of the HEU and related approval actions.

1.4.4 Mitigation Monitoring and Reporting Plan

Throughout this EIR, mitigation measures are identified where applicable and presented in language that will facilitate preparation of a Mitigation Monitoring and Reporting Plan (MMRP). As required under CEQA, a MMRP will be prepared and presented to the City Council for adoption at the same time they consider approval of the Project, and will identify the timing and roles and responsibilities for implementation of adopted mitigation measures.

1.5 Organization of the Draft EIR

This *Introduction* (Chapter 1) presents an overview of the process by which this EIR will be reviewed and used by the decision-makers in their consideration of the project.

The *Summary* (Chapter 2) includes a brief project description and a summary table that lists the environmental impacts, proposed mitigation measures, and the level of significance after mitigation. Detailed analysis of these impacts and mitigation measures is provided in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*. The Summary also provides a summary of the alternatives to the project.

The *Project Description* (Chapter 3) describes the project location and boundaries; lists the project objectives; and provides a general description of the technical, economic, and environmental characteristics of the project. This chapter also includes a list of required approvals for the project and other agencies that may be responsible for approving aspects of the project.

The *Environmental Setting, Impacts, and Mitigation Measures* (Chapter 4) contains a description of the environmental setting (existing physical environmental conditions), the regulatory framework, and the environmental impacts (including cumulative impacts) that could result from the project. It includes the thresholds of significance used to determine the significance of adverse environmental effects. This chapter also identifies the mitigation measures that would avoid or substantially lessen these significant adverse impacts. The impact discussions disclose the significance of each impact both with and without implementation of mitigation measures.

Alternatives to the Project (Chapter 5) evaluates a range of reasonable alternatives to the project and identifies an environmentally superior alternative, consistent with the requirements of CEQA.

The alternatives analysis evaluates each alternative's ability to meet the project objectives and its ability to reduce environmental impacts.

Other CEQA Considerations (Chapter 6) addresses growth-inducing effects, significant irreversible environmental changes, and significant unavoidable environmental effects of the Project.

Report Preparers (Chapter 7) identifies the authors of the EIR. Persons and documents consulted during preparation of the EIR are listed at the end of each analysis section.

Appendices. The appendices include environmental scoping information and technical reports and data used in the preparation of the Draft EIR. These documents are included on the City's Project website.

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CHAPTER 2

Summary

2.1 Project Summary

As provided by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines (*CEQA Guidelines*), this chapter provides a brief summary of the City of Mountain View Housing Element Update (HEU) and its consequences. This chapter is intended to summarize in a stand-alone section the Project described in Chapter 3, *Project Description*, the impacts and mitigation measures discussed in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, and the alternatives analysis presented in Chapter 5, *Alternatives to the Project*.

This Draft Environmental Impact Report (Draft EIR) has been prepared to evaluate the anticipated environmental effects of the HEU in conformance with the provisions of CEQA and the *CEQA Guidelines*. The lead agency, the City of Mountain View (City), is the public agency that has the principal responsibility for approving the HEU.

This EIR is a Program EIR, as provided for in CEQA Guidelines Section 15168. Section 15168(a) of the CEQA Guidelines states that a Program EIR is appropriate for projects which are "... a series of actions that can be characterized as one large project and are related either:

1. Geographically;
2. A logical part in the chain of contemplated actions;
3. In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
4. As individual activities carried out under the same authorizing statutory or regulating authority and having generally similar environmental effects which can be mitigated in similar ways."

Section 15168(b) of the CEQA Guidelines further states: "Use of a Program EIR can provide the following advantages. The Program EIR can:

1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
2. Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;
3. Avoid duplicate consideration of basic policy considerations;

4. Allow the Lead Agency to consider broad policy alternative and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
5. Allow reduction in paperwork.”

Future discretionary actions that would be facilitated by the HEU’s adoption, particularly those related to the development of housing, would require additional assessment to determine consistency with the analysis provided in this Program EIR. Potential future actions would also be subject to the mitigation measures established in this Program EIR unless superseded by a subsequent environmental document that is required to analyze significant environmental impacts not foreseen in this Program EIR.

2.2 Project Summary

2.2.1 Project Location

The City of Mountain View is located in the southern San Francisco Bay area, approximately 11 miles northwest of San José, California. The City is located in northern Santa Clara County, and is bordered by the San Francisco Bay to the north, the City of Palo Alto to the west, the City of Los Altos to the south and southwest, and Moffett Federal Airfield and the City of Sunnyvale to the east. The City encompasses approximately 12.24 square miles with a population of approximately 82,376 people. The geographic extent of environmental analysis included in the EIR for the proposed project will be the City limits.

2.2.2 Project Site

The HEU would identify specific sites appropriate for the development of multifamily housing, and the City would rezone those areas if/as necessary to meet the requirements of State law. The proposed sites that can accommodate development of multifamily housing are primarily located within the boundaries of adopted Precise Plans and along commercial corridors, though sites are also included from other parts of the City.

2.2.3 Background

State law requires the City to have and maintain a general plan with specific contents in order to provide a vision for the City’s future, and inform local decisions at land use and development, including issues such as circulation, conservation, and safety. The City’s current General Plan was adopted in 2012 and contains eight chapters or “elements,” including one about housing. The City’s Housing Element was last updated in 2014, and covers the “5th Cycle” Housing Element planning period from 2014 through 2022. Because this period is drawing to a close, State law [Government Code Section 65588] requires the City to update its Housing Element and provides a deadline of January 31, 2023 for submission of an adopted Housing Element. In accordance with State law, the planning period for the updated Housing Element will extend from January 31, 2023 to January 31, 2031, and is referred to as the “6th cycle”.

In addition to including goals, policies, and implementation programs regarding housing issues, Housing Elements must include an inventory or list of housing sites at sufficient densities to accommodate a specific number of units at various levels of affordability (very low income, low income, moderate income, and above moderate income) assigned to the City by the Association of Bay Area Governments (ABAG). This assignment is referred to as a Regional Housing Needs Allocation (RHNA).

The City’s existing 5th Cycle Housing Element includes housing sites inventory sufficient to accommodate the 2015 RHNA allocation of 2,926 units. In the 2018 annual progress report (APR), the City utilized the recently-updated North Bayshore Precise Plan to replace lower and moderate income sites lost to redevelopment, as well as to create a significant buffer. On December 16, 2021, ABAG adopted the Final RHNA, which distributed the regional housing need issued by the Department of Housing and Community Development (HCD). The HCD allocated 441,176 housing units to the nine-county Bay Area (“bulk allocation”).

The City of Mountain View’s RHNA is 11,135 units, distributed among four income categories as shown in **Table 2-1**, below.

**TABLE 2-1
MOUNTAIN VIEW REGIONAL HOUSING NEEDS ALLOCATION
6TH HOUSING ELEMENT CYCLE (2023-2031)**

	Very Low Income Units (0-50% AMI)	Low Income Units (51-80% AMI)	Moderate Income Units (81-120% AMI)	Above Mod Units (>120% AMI)	Total New Units
6 th Cycle RHNA	2,773	1,597	1,885	4,880	11,135
% of Total	25%	14%	17%	44%	100%

SOURCE: Association of Bay Area Governments (ABAG), *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031* adopted December 2021.

The HEU is required to identify housing sites to meet the City’s RHNA at specified levels of affordability. HCD recommends that jurisdictions plan for their RHNA *plus* a buffer of additional units equivalent to 15-30 percent. To be conservative, the City intends to identify a buffer of at least 20 to 30 percent of units at all income levels and a total unit capacity of up to approximately 15,000 units.

In addition, the HEU would identify sites appropriate for the development of multifamily housing, and the City would rezone those sites as necessary to meet the requirements of State law. The City will need to maintain internal consistency between various elements of the General Plan and zoning ordinance, therefore, changes to elements of the General Plan Land Use Map, Zoning Ordinance, Zoning Map, and Precise Plans may be needed to ensure that the General Plan as a whole remains consistent with the HEU.

2.2.4 Project Description

The Project analyzed in this EIR would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan.

The Housing Element itself would contain:

- An updated housing needs assessment;
- Updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing;
- A housing inventory that meets the City's RHNA and provides a buffer of additional housing development capacity.

The Project would also include modifications to provisions in the City's zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory, which is described below.

Housing Needs Assessment & Updated Goals, Policies, and Programs

The proposed Project would adopt updated goals, policies, and programs to address the maintenance, preservation, improvement, and development of housing and to affirmatively further fair housing in the City. Proposed updates to the goals, policies, and programs in the 5th Cycle Housing Element were informed by a review of the implementation and effectiveness of that document, as well as updated information on demographic and economic trends, existing housing and market conditions, and special housing needs experienced by disabled persons, elderly households, large family households, single female-headed households, and homeless persons. The proposed goals, policies, and programs were also crafted to address an updated assessment of non-governmental and governmental constraints to the development, conservation, and rehabilitation of housing in the City, and to affirmatively further fair housing. For more information, including the definition of these terms, and the proposed updates to goals, policies, and programs, please see the Public Review Draft Housing Element Update available on the City's website at <https://www.mvhousingelement.org/>.

Housing Sites Inventory

The proposed Project would address the requirements for a housing inventory and meet the City's 6th Cycle RHNA plus a buffer via a number of strategies as provided for in State law and HCD guidance.

Existing Zoning and General Plan Capacity

Pipeline Projects. The City has approved a number of housing and mixed-use projects that are likely to result in production of multifamily housing during the housing element planning period. The City also has active applications on file for single family and multifamily housing and/or mixed use developments that may be approved, constructed, and occupied during the housing element planning period. These types of "pipeline projects" would count towards the City's RHNA, and could collectively total at least 8,600 units by 2031.

Accessory Dwelling Units. The City may assume that the development of accessory dwelling units (ADUs) during the planning period is equivalent to that in recent years. Based on information contained in the City’s annual production reports to HCD, approximately 96 ADUs are assumed over the eight year planning period.

Existing Opportunity Sites. The City’s existing precise plans, General Plan Land Use designations, and zoning permit a range of residential densities in different areas of the City that can accommodate development of multifamily housing without adjustment. A preliminary analysis estimates that there may be sufficient sites to accommodate approximately 4,700 units. Most of these sites are within Precise Plan areas, including El Camino Real, San Antonio, North Bayshore, and East Whisman, although there are sites identified for inclusion in the inventory in other areas of the City as well. See Figure 3-2 for a map showing City neighborhoods and precise plan locations.

General Plan, Zoning and Precise Plan Amendments

Pipeline Sites Requiring Rezoning and General Plan Amendment. There are a limited number of sites that could accommodate multifamily housing – and in some cases specifically affordable housing for lower income households – if rezoned to allow residential use at appropriate densities. These sites, which include development projects under review and under discussion are located at 1265 Montecito Avenue, 1020 Terra Bella Avenue, 1010 Linda Vista Avenue and East Evelyn Avenue between Highway 85 and Pioneer Way, and could accommodate approximately 580 units.

Rezoning Adopted with the Housing Element. The City proposes to adopt Zoning and Precise Plan Amendments concurrent with this Housing Element Update, to clarify standards for allowed uses and densities at General Plan Village Centers and El Camino Real Village Centers. These amendments accommodate approximately 800 units in the site inventory, but the total additional capacity of these areas is greater – approximately 2,500 units¹.

Opportunity Sites Requiring Rezoning and/or General Plan Amendments (“Back-Pocket” Areas). In the event that the above opportunities are inadequate to accommodate the RHNA, either at the time of Housing Element adoption or over the course of the 6th Cycle due to the “no net loss” law, the proposed Housing Element will also include programs to adopt additional rezonings and General Plan amendments in targeted urban infill areas (areas on previously developed sites and/or completely surrounded by urban uses):

- Moffett Boulevard
- Other shopping areas, such as Leong Drive, Bailey Park shopping center, Monta Loma Plaza
- A Joint Development at the Mountain View Transit Center
- Other non-residential sites south of El Camino Real, such as 1949 Grant Road and offices near Blossom Valley Shopping Center

¹ This number is less than the total amount of units that could be allowed across these sites, since it is unreasonable to assume replacement of all existing uses over the horizon of this study. The number does consider the sites most likely to be redeveloped.

These rezoning opportunities could accommodate approximately 1,000 additional units, depending on the densities adopted.

Total Inventory. The HEU is planning for the period from January 31, 2023 through January 31, 2031, and is expected to plan for approximately 15,000 new housing units within this period, although the actual pace of development will depend on market conditions, property owner interest, and other factors. Also, of the approximately 15,000 new units, only approximately 1,400 would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. However, development of these units may be accelerated compared to the theoretical No Project scenario, due to programs in the Housing Element that streamline, incentivize or remove constraints for housing.

Adoption of the HEU would potentially result in 4,100 more dwelling units in the in the City’s cumulative capacity beyond 2031 than would otherwise occur. This is due to the additional development potential that would be created the General Plan, Zoning and Precise Plan Amendments described above. The balance of the units included in the proposed HEU represent existing development potential that is already reflected in the City’s cumulative growth capacity.

2.2.5 Project Objectives

CEQA *Guidelines* Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

“A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.”

The primary purpose of the HEU is to comply with the requirements of State law by analyzing existing and projected housing needs, and updating goals, policies, objectives, and implementation programs for the preservation, improvement, and development of housing. The proposed Project is intended to ensure the City’s conformance with State housing requirements and seeks to:

- Protect existing housing;
- Encourage new housing for households at all income levels and for households with a range of diverse housing needs;
- Remove undue constraints on new housing development, including for affordable housing development;
- Affirmatively further fair housing; and
- Identify specific sites that could accommodate required housing units to meet the City’s RHNA.

Conducting community engagement and soliciting feedback to inform the contents of the HEU is a critical component of the planning process and will help to shape the HEU that is ultimately adopted by the City Council.

2.3 Environmental Impacts and Mitigation Measures

As provided by the CEQA *Guidelines* Section 15123(b)(1), an EIR must provide a summary of the impacts, mitigation measures and significant impacts after mitigation for a proposed project. This information is presented in the various subsections within Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR, and summarized in **Table 2-2** at the end of this chapter.

2.3.1 Significant and Unavoidable Impacts

The Project would result in the following significant and unavoidable impact:

Impact AIR-2: Implementation of the HEU would not 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. (*Significant and Unavoidable with Mitigation*)

2.4 Summary of Alternatives

2.4.1 Environmentally Superior Alternative

Chapter 5, *Alternatives to the Project*, analyzes a range of reasonable alternatives to the proposed HEU, including the No Project Alternative and the Reduced Sites Alternative. The analysis of the alternatives, including a comparison of alternatives to the proposed HEU, is presented in Chapter 5, which provides a summary of impact levels within all environmental topic areas. Overall, the analysis shows that neither the No Project Alternative nor the Reduced Sites Alternatives would reduce the proposed HEU's significant impact related to air quality, but may reduce its severity due to lesser development overall. The No Project would also result in a new significant land use and planning-related impact and not meet project objectives.

Based on the evaluation described in Chapter 5, the Reduced Sites Alternative would be the Environmentally Superior Alternative for the purpose of this analysis based on its potential reduction in overall criteria air pollutant emissions and air quality-related health risk and the ability of the alternative to meet all of the basic project objectives of the proposed HEU (albeit to a lesser degree than the proposed HEU).

2.5 Areas of Controversy Raised in Scoping Comments

Section 15123(b)(2) of the CEQA *Guidelines* requires that an EIR summary identify areas of controversy known to the lead agency, including those issues raised by other agencies and the public. Issues raised by the public have included concerns regarding biological resources, cultural resources and tribal cultural resources, hazards and hazardous materials, land use and planning, population and housing, public services and recreation, and transportation. As a result, these issues are potential areas of controversy.

2.6 Issues to Be Resolved

Section 15123(b)(3) of the CEQA *Guidelines* requires that an EIR present the issues to be resolved including the choice among alternatives and whether or how to mitigate identified significant effects. The major issues to be resolved for the Project include decisions by the City of Mountain View, as the Lead Agency, as to whether:

- This EIR adequately describes the environmental impacts of the Project;
- Recommended mitigation measures should be adopted or modified;
- Additional mitigation measures need to be applied to the Project;
- Feasible alternatives exist that would achieve the objectives of the Project and reduce significant environmental impacts;
- Significant and unavoidable impacts would occur if the Project is adopted and implemented; and
- The Project should or should not be approved.

**TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT**

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Section 4.1, Aesthetics		
Impact AES-1: Implementation of the HEU would not have a substantial adverse effect on a scenic vista. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact AES-2: Implementation of the HEU would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact AES-3: Implementation of the HEU would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact AES-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not have a substantial adverse effect on a scenic vista. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact AES-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact AES-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.2, Air Quality		
Impact AIR-1: Implementation of the HEU would not conflict with or obstruct implementation of the applicable air quality plan. <i>(Less than Significant)</i>	None required	Less Than Significant

**TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT**

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
<p>Impact AIR-2: Implementation of the HEU 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. <i>(Significant and Unavoidable with Mitigation)</i></p>	<p>Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.</p> <p>Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD’s criteria air pollutant thresholds.</p> <p>In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.</p> <p>Clean Construction Equipment.</p> <ol style="list-style-type: none"> 1. The project applicant shall use electric construction equipment when feasible. 2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement must state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract. <p>The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.</p> <ol style="list-style-type: none"> 3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit. 	<p>Significant and Unavoidable</p>

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
	Operational Emission Reductions 1. Projects shall be constructed without natural gas infrastructure and shall be “all electric.” 2. As required by Mitigation Measure GHG-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time. 3. Project applicants that do not screen out from VMT impact analysis shall implement VMT reduction measures as required by Mitigation Measure TRA-1.	
Impact AIR-3: Implementation of the HEU would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant with Mitigation)	Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction. Project applicants within the HEU area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD's health risk significance thresholds for projects. In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AIR-1's requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less than significant level. In addition, all tower cranes, forklifts, man- and material- lifts shall be electric powered.	Less Than Significant
Impact AIR-4: Implementation of the HEU would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)	None required	Less Than Significant
Impact AIR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of sensitive receptors to substantial levels of fine particulate matter (PM2.5) and TACs under cumulative conditions. (Less than Significant Impact with Mitigation)	Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction. See above.	Less Than Significant
Impact AIR-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not combine with other sources of odors that would adversely affect a substantial number of people. (Less than Significant)	None required	Less Than Significant

**TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT**

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Section 4.3, Biological Resources		
<p>Impact BIO-1: Implementation of the HEU would 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. (Less than Significant with Mitigation)</p>	<p>Mitigation Measure BIO-1: Special-Status Bat Protection Measures.</p> <p>In coordination with the City, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the subsequent project sites to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:</p> <ul style="list-style-type: none"> • Removal of trees shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 16 – August 14) and outside the months of winter torpor (approximately October 16 – February 28), to the extent feasible. • If removal of trees during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and building removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by a qualified biologist. A 100-foot no-disturbance buffer is a typical protective buffer distance; however, this may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation) as well as the type of construction activity which would occur around the roost site. • The qualified biologist shall be present during tree removal if potential bat roosting habitat or active bat roosts are present. Trees with active roosts shall only be removed when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F. • Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process: <ul style="list-style-type: none"> - On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. - On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). 	<p align="center">Less Than Significant</p>
<p>Impact BIO-2: Implementation of the HEU 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. (Less than Significant)</p>	<p>None required</p>	<p align="center">Less Than Significant</p>

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact BIO-3: Implementation of the HEU would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant)	None required	Less Than Significant
Impact BIO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on Biological Resources. (Less than Significant with Mitigation)	Mitigation Measure BIO-1: Special-Status Bat Protection Measures. See above.	Less Than Significant
Section 4.4, Cultural Resources and Tribal Cultural Resources		
Impact CUL 1: Implementation of the HEU would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. (Less than Significant with Mitigation)	<p>Mitigation Measure CUL 1a: Historic Resource Evaluation.</p> <p>Prior to issuance of a demolition permit for any previously unevaluated building 45-years of age or older on a site included in the housing sites inventory, the City shall require an evaluation of historical significance that includes consideration of the criteria for listing in the National Register of Historic Places, the California Register of Historical Resources, and the Mountain View Register of Historic Resources. This evaluation shall be completed by a professional who meets the Secretary of the Interior's Professional Qualifications for History, Architecture, Architectural History, or Historic Architecture.</p> <p>In accordance with Section 5024.1, if the building has been previously evaluated for eligibility as a historic resource under CEQA and that evaluation or survey is more than five-years old, the findings of that evaluation should be confirmed by a professional who meets the Secretary of the Interior's Professional Qualifications as stated above.</p> <p>Mitigation Measure CUL 1b: Historic Resource Avoidance.</p> <p>If, after implementation of Mitigation Measure CUL 1a, the subject property is found to qualify as a historic resource and the proposed project includes demolition of the historic resource, the project shall be redesigned to remove or avoid demolition. Any redesign that includes significant alteration of the historic resource, as defined by Section 36.54.55(e) of the City of Mountain View Zoning Code, shall be required to comply with City Standard Condition of Approval (Secretary of the Interior Standards).</p>	Less Than Significant
Impact CUL 2: Implementation of the HEU may cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (Less than Significant with Mitigation)	<p>Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources.</p> <p>If pre-contact or historic-era archaeological resources are encountered during project construction and implementation, all construction activities within 100 feet shall halt and the City shall be notified. Pre-contact 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the U.S. Secretary of the Interior's Standards (SOIS) for Archeology shall inspect the findings within 24 hours of discovery.</p>	Less Than Significant

**TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT**

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
	<p>If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4, with a preference for preservation in place. If preservation in place is feasible, this may be accomplished through one of the following means: (1) siting improvements to completely avoid the archaeological resource; (2) incorporating the resource into a park or dedicated open space, by deeding the resource into a permanent conservation easement; (3) capping and covering the resource before building the project on the resource site after the resource has been thoroughly studied by a SOIS qualified archaeologist and a report written on the findings.</p> <p>If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).</p> <p>Mitigation Measure CUL 2b: Cultural Resources Study Requirements.</p> <p>Prior to approval of development permits for multifamily projects that include ground-disturbing activities, City staff shall review the most recent and updated Northwest Information Center (NWIC) list: Historic Property Directory for the County of Santa Clara, to determine if known archaeological sites underlie the proposed project site. If it is determined that known cultural resources are within 0.25-mile of the project site, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.</p>	

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact CUL 3: Implementation of the HEU may disturb any human remains, including those interred outside of dedicated cemeteries. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact TCR-1: Implementation of the HEU may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. <i>(Less than Significant with Mitigation)</i>	Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources. See above. Mitigation Measure CUL 2b: Cultural Resources Study Requirements. See above.	Less Than Significant
Impact CUL 1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on historic architectural resources. <i>(Less than Significant with Mitigation)</i>	Mitigation Measure CUL 1a: Historic Resource Evaluation. See above. Mitigation Measure CUL 1b: Historic Resource Avoidance. See above.	Less Than Significant
Impact CUL 2.CU: Implementation of the HEU, in combination with other cumulative development, would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or could disturb human remains, including those interred outside of formal cemeteries. <i>(Less than Significant Impact, with Mitigation)</i>	Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources. See above. Mitigation Measure CUL 2b: Cultural Resources Study Requirements. See above.	Less Than Significant
Impact TCR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on tribal cultural resources. <i>(Less than Significant with Mitigation)</i>	Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources. See above. Mitigation Measure CUL 2b: Cultural Resources Study Requirements. See above.	Less Than Significant
Section 4.5, Energy		
Impact ENE-1: Implementation of the HEU would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact ENE-1.CU: Implementation of the HEU would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction and operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Section 4.6, Geology, Soils, and Paleontological Resources		
Impact GEO-1: Implementation of the HEU 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 or strong seismic ground shaking. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-2: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-3: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-4: Implementation of the HEU would not result in substantial soil erosion or the loss of topsoil. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-5: Implementation of the HEU 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-6: Implementation of the HEU would not be located on expansive soil, creating substantial direct or indirect risks to life or property. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact GEO-7: Implementation of the HEU would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. <i>(Less than Significant with Mitigation)</i>	None required	Less Than Significant
Impact GEO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on geology, soils, or paleontological resources. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Section 4.7, Greenhouse Gas Emissions		
<p>Impact GHG-1: Implementation of the HEU would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. <i>(Less than Significant with Mitigation)</i></p>	<p>Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2. Subsequent development projects proposed as part of the HEU shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.</p> <p>Mitigation Measure TRA-1: Implement VMT Reduction Measures. See Section 4.14, <i>Transportation</i>, below.</p>	Less Than Significant
<p>Impact GHG-2: Implementation of the HEU would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. <i>(Less than Significant with Mitigation)</i></p>	<p>Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2. See above.</p> <p>Mitigation Measure TRA-1: Implement VMT Reduction Measures. See Section 4.14, <i>Transportation</i>, below.</p>	Less Than Significant
<p>Impact GHG-1.CU: Implementation of the HEU, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases. <i>(Less than Significant with Mitigation)</i></p>	<p>Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2. See above.</p> <p>Mitigation Measure TRA-1: Implement VMT Reduction Measures. See Section 4.14, <i>Transportation</i>, below.</p>	Less Than Significant
Section 4.8, Hazards and Hazardous Materials		
<p>Impact HAZ-1: Implementation of the HEU would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. <i>(Less than Significant)</i></p>	None required	Less Than Significant
<p>Impact HAZ-2: Implementation of the HEU 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. <i>(Less than Significant)</i></p>	None required	Less Than Significant
<p>Impact HAZ-3: Implementation of the HEU would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment. <i>(Less than Significant with Mitigation)</i></p>	<p>Mitigation Measure HAZ-1: Phase I Environmental Site Assessment.</p> <p>Prior to the initiation of any construction requiring ground-disturbing activities on listed active hazardous materials cleanup sites, the project applicant shall complete a Phase I environmental site assessment for that property in accordance with American Society for Testing and Materials Standard E1527 for those active hazardous materials sites to ascertain their current status. Any recommended follow up sampling (i.e., Phase II activities) set forth in the Phase I assessment shall be implemented prior to construction. The results of Phase II studies, if necessary, shall be</p>	Less Than Significant

**TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT**

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
	<p>submitted to the local overseeing agency and any required remediation or further delineation of identified contamination shall be completed prior to commencement of construction.</p> <p>Prior to final project design of any individual project that includes any earth-disturbing activities, the project applicant shall conduct a Phase I Environmental Site Assessment (Phase I assessment). The Phase I assessment shall be prepared in general accordance with ASTM Standard E1527-21, Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process (or most current edition that is in force at the time of final project design), which is the current industry standard. The Phase I assessment shall include a records review of appropriate federal, State, and local databases within ASTM-listed search distances regarding hazardous materials use, storage, or disposal at the given site, a review of historical topographic maps and aerial photographs, a site reconnaissance, interviews with persons knowledgeable about the sites historical uses, and review of other relevant existing information that could identify the potential existence of Recognized Environmental Conditions, including hazardous materials, or contaminated soil or groundwater. If no Recognized Environmental Conditions are identified, then no further action would be required.</p> <p>If Recognized Environmental Conditions are identified and the Phase I assessment recommends further action, the project applicant shall conduct the appropriate follow-up actions, which may include further records review, sampling of potentially hazardous materials, and possibly site cleanup. In the event that site cleanup is required, the project shall not proceed until the site has been cleaned up to the satisfaction of the appropriate regulatory agency (e.g., DTSC, RWQCB, or SCCEHD) such that the regulatory agency issues a No Further Action letter or equivalent.</p>	
<p>Impact HAZ-4: Implementation of the HEU would not result in a safety hazard or excessive noise for people residing or working in the project area related to a public airport or public use airport. <i>(Less than Significant)</i></p>	None required	Less Than Significant
<p>Impact HAZ-5: Implementation of the HEU would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. <i>(Less than Significant)</i></p>	None required	Less Than Significant
<p>Impact HAZ-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts relative to hazards and hazardous materials. <i>(Less than Significant)</i></p>	None required	Less Than Significant
<p>Section 4.9, Hydrology and Water Quality</p>		
<p>Impact HYD-1: Implementation of the HEU would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. <i>(Less than Significant)</i></p>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact HYD-2: Implementation of the HEU would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact HYD-3: Implementation of the HEU 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: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact HYD-4: Implementation of the HEU would not risk release of pollutants due to project inundation due to being located in a flood hazard zone. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact HYD-5: Implementation of the HEU would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact HYD-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on hydrology and water quality. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.10, Land Use and Planning		
Impact LUP-1: Implementation of the HEU would not physically divide an established community. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact LUP-2: Implementation of the HEU 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact LUP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not physically divide an established community. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact LUP-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.11, Noise		
Impact NOI-1: Implementation of the HEU would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-2: Stationary noise sources from development within the HEU area would not result in a substantial 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NO-3: Implementation of the HEU would not generate excessive groundborne vibration or groundborne noise levels. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-4: Transportation increases along roadways under the HEU would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-5: Implementation of the HEU would not expose people residing or working in the project area to excessive noise levels due to being located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-1.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in generation of a substantial temporary 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. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact NOI-2.CU: Stationary noise sources from development within the HEU area, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-3.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of persons to or generation of excessive ground borne vibration levels. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact NOI-4.CU: Transportation activities under the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project and cumulative development. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.12, Population and Housing		
Impact POP-1: Implementation of the HEU would not induce substantial unplanned population growth in an area, either directly or indirectly. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact POP-2: Implementation of the HEU would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact POP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on population and housing. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.13, Public Services and Recreation		
Impact PSR-1: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
other performance objectives for fire protection. <i>(Less than Significant)</i>		
Impact PSR-2: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered police 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact PSR-3: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered school 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact PSR-4: Implementation of the HEU 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact PSR-5: Implementation of the HEU would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact PSR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact PSR-2.CU: Implementation of the HEU, combined with cumulative development in the vicinity and citywide, would not result in significant cumulative impacts to parks and recreation. <i>(Less than Significant Impact)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Section 4.14, Transportation		
Impact TRA-1: Implementation of The HEU would not conflict with an applicable program, plan, ordinance, or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact TRA-2: Implementation of the HEU would not exceed an applicable VMT threshold of significance. <i>(Less than Significant with Mitigation)</i>	<p>Mitigation Measure TRA-1: Implement Vehicle Miles Traveled (VMT) Reduction Measures.</p> <p>Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the Santa Clara Valley Transportation Authority (VTA) VMT tool:</p> <ul style="list-style-type: none"> • Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT. • Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City's approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.) • Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs. • Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools. 	Less Than Significant
Impact TRA-3: Implementation of the HEU would not substantially increase hazards due to a geometric design feature or incompatible uses. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact TRA-4: Implementation of the HEU would not result in inadequate emergency access. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact TRA-1.CU: Implementation of the HEU, in combination with cumulative development, would not conflict with an applicable program, plan, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact TRA-2.CU: Implementation of the HEU, in combination with cumulative development, would not exceed an applicable VMT threshold of significance. <i>(Significant and Unavoidable with Mitigation)</i>	Mitigation Measure TRA-1: Implement VMT Reduction Measures. See above.	Significant and Unavoidable
Impact TRA-3.CU: Implementation of the HEU, in combination with cumulative development, would not substantially increase hazards due to a geometric design feature or incompatible uses. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact TRA-4.CU: Implementation of the HEU, in combination with cumulative development, would not result in inadequate emergency access. <i>(Less than Significant)</i>	None required	Less Than Significant
Section 4.15, Utilities and Service Systems		
Impact UTL-1: Implementation of the HEU would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. <i>(Less than Significant with Mitigation)</i>	Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements. Subsequent development projects shall contribute the fair share amount identified by the City of Mountain View Public Works Department to fund capital improvements to the water, sanitary sewer, and stormwater drainage systems prior to issuance of a building permit.	Less Than Significant
Impact UTL-2: Implementation of the HEU would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact UTL-3: Implementation of the HEU would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. <i>(Less than Significant)</i>	None required	Less Than Significant

TABLE 2-2 (CONTINUED)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROJECT

Impacts	Mitigation Measures	Significance After Incorporation of Mitigation
Impact UTL-4: Implementation of the HEU 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. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact UTL-5: Implementation of the HEU would not Comply with federal, state, and local management and reduction statutes and regulations related to solid waste. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact UTL-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on utility infrastructure. <i>(Less than Significant with Mitigation)</i>	Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements. See above.	Less Than Significant
Impact UTL-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on water supply. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact UTL-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on wastewater treatment capacity. <i>(Less than Significant)</i>	None required	Less Than Significant
Impact UTL-4.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on solid waste. <i>(Less than Significant)</i>	None required	Less Than Significant

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CHAPTER 3

Project Description

3.1 Introduction

State law requires the City to have and maintain a general plan with specific contents in order to provide a vision for the City’s future. The general plan informs local decisions about land use and development, including issues such as circulation, conservation, and safety. The City of Mountain View’s 2030 General Plan was comprehensively updated in 2012 and identifies major themes and overarching strategies related to quality of life, sustainability, diversity, health and wellness, and economic prosperity. The 2030 General Plan update included six topical chapters or “elements” and one chapter summarizing the character of eight planning areas and identifying policies specific to each area. The City maintains the Housing Element of its General Plan as a separate document, although it comprises an integral part of the overall plan, providing goals, policies, and programs regarding the preservation and development of housing in the City.

The City’s Housing Element was last updated in 2014, and covers the “5th Cycle” housing element planning period from 2014 through 2022. Because this period is drawing to a close, State law [Government Code Section 65588]

requires the City to update its Housing Element by the deadline of January 31, 2023. In accordance with State law, the planning period for the updated Housing Element is from January 31, 2023 to January 31, 2031 and is referred to as the “6th cycle.”

Concurrent with the Housing Element update, the City proposes to undertake any changes to the City’s General Plan Land Use Map, zoning ordinance, Zoning Map and Precise Plans that are needed to reflect the updated Housing Element and to maintain consistency with the General Plan. Over the course of implementing the Housing Element, the City may also update the General Plan Land Use Map, Zoning Ordinance, Zoning Map and Precise Plans as directed by the Housing Element. These proposed actions (updates to the Housing Element of the General Plan, General Plan Land Use Map, and conforming changes to the Zoning Ordinance, Zoning Map and Precise Plans) are the subject of this Environmental Impact Report (EIR), and are collectively referred to as the Housing Element Update (HEU) or “the Project.” The HEU is described in this

**Current Contents of the
Mountain View 2030 General Plan***

1. Planning Areas
2. Land Use and Design
3. Mobility
4. Infrastructure and Conservation
5. Parks, Open Space and Community Facilities
6. Noise
7. Public Safety
8. Housing Element (separately updated in 2014)

*As amended thru April 2021

chapter, which also provides background information, project objectives, and describes intended uses of the EIR, including approval actions required.

3.2 Project Location and Setting

The proposed Project would update the City of Mountain View's Housing Element, which is a policy document that addresses housing issues and applies citywide. The housing sites inventory component of the housing element primarily identifies sites for development of multifamily housing that are principally located within the boundaries of adopted Precise Plans (see Section 3.3.1 below) and along commercial corridors, though sites are also included from other parts of the City.

The City includes approximately 12.24 square miles and is located in northern Santa Clara County; it borders the San Francisco Bay to the North, the City of Palo Alto to the West, the City of Los Altos to the South and Southwest, and Moffett Federal Airfield and the City of Sunnyvale to the East. (See **Figure 3-1.**)

3.3 Background

The City's current General Plan land use designations, zoning, and precise plans provide for development of multifamily housing in many areas of the City and provides the context for the HEU and its inventory of housing sites. This section provides a summary of these existing land use controls as well as a summary of required components of the HEU.

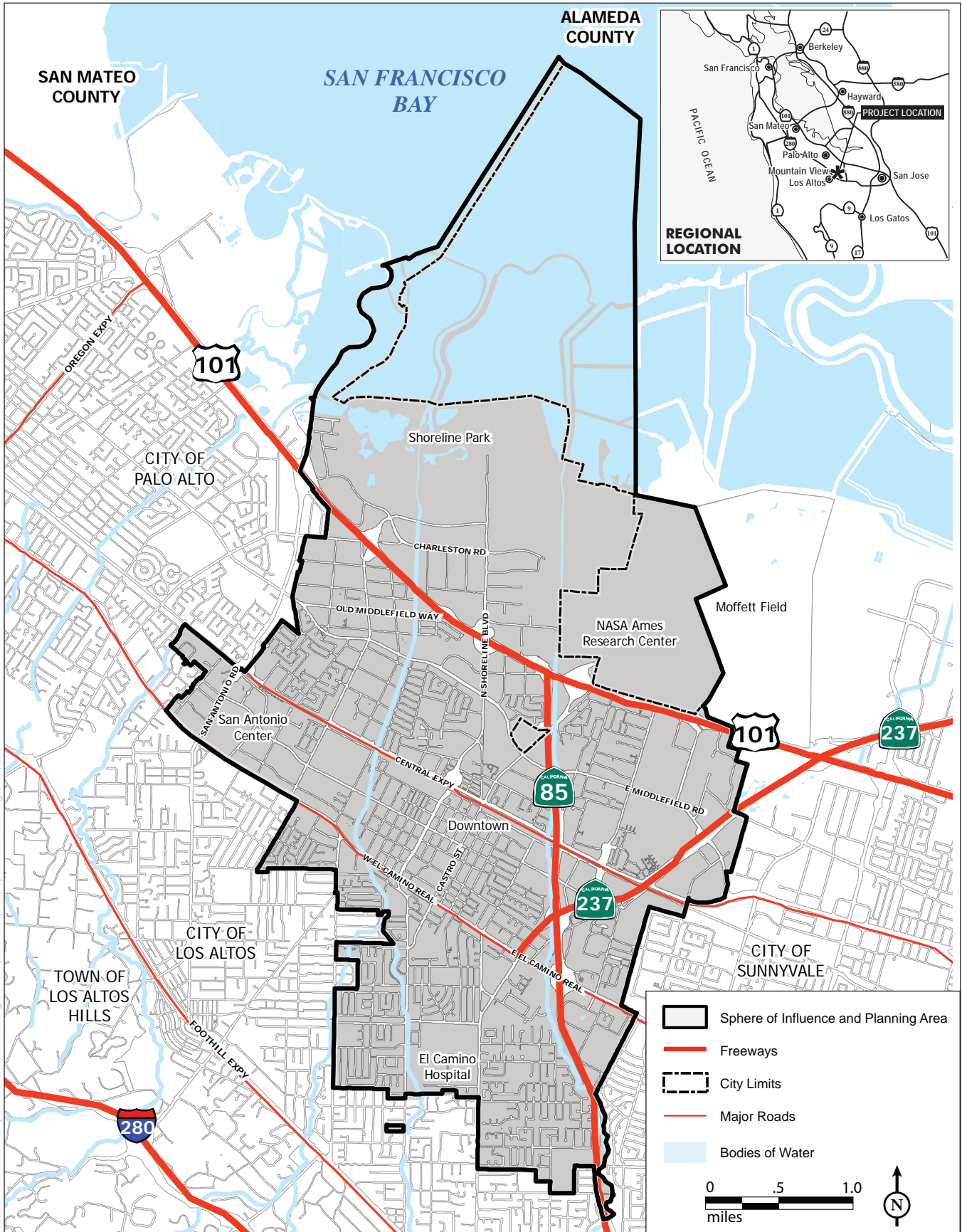
3.3.1 Existing Planning and Zoning

2030 General Plan

The 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. Included in the 2030 General Plan are land use designations and a land use map. Land use designations define the type, intensity and density of development within the City, and include five general groups: Residential; Commercial; Office/Industrial; Mixed-Use; and Public/Institutional. Multifamily residential uses are allowed under the Residential and Mixed-Use land use designations at varying densities ranging from 7 to 80 dwelling units per acre in residential designations or 1.05 to 3.0 FAR in mixed-use designations.

Zoning Ordinance

The City's Zoning Ordinance plays a key role in regulating development type, density, and land use, and generally supports the vision of the 2030 General Plan. Development standards identified in the Zoning Ordinance include setbacks, lot area, lot width, density, floor area ratio, site coverage, landscaping and open area requirements, height limits, storage, and parking. The Zoning Ordinance organizes zoning districts into four broad categories: residential; commercial/professional; industrial; and special purpose. Multifamily residential units are permitted uses under the R3 (Residential—Multiple-Family), R4 (Residential—High-Density Multiple-Family), and Planned community (P) districts.



SOURCE: City of Mountain View, 2011

City of Mountain View Housing Element Update

Figure 3-1
Project Location Map



Precise Plans

To address site-specific development needs, the City has developed 25 Precise Plans covering various locations within the City. Precise Plans are a tool for coordinating future public and private improvements on specific properties where special conditions of size, shape, land ownership, or existing or desired development require particular attention. The Precise Plans provide detailed specifications for land uses, relationship to surrounding areas, use intensity, circulation, design, procedures for development review, and special conditions for development occurring within each Precise Plan area. The City's Precise Plan areas are shown in **Figure 3-2**. In the City, Precise Plans range from a small 3-acre development to large neighborhoods. The Precise Plans covering the largest areas and with the highest development potential as relevant to the HEU are detailed below:

East Whisman Precise Plan

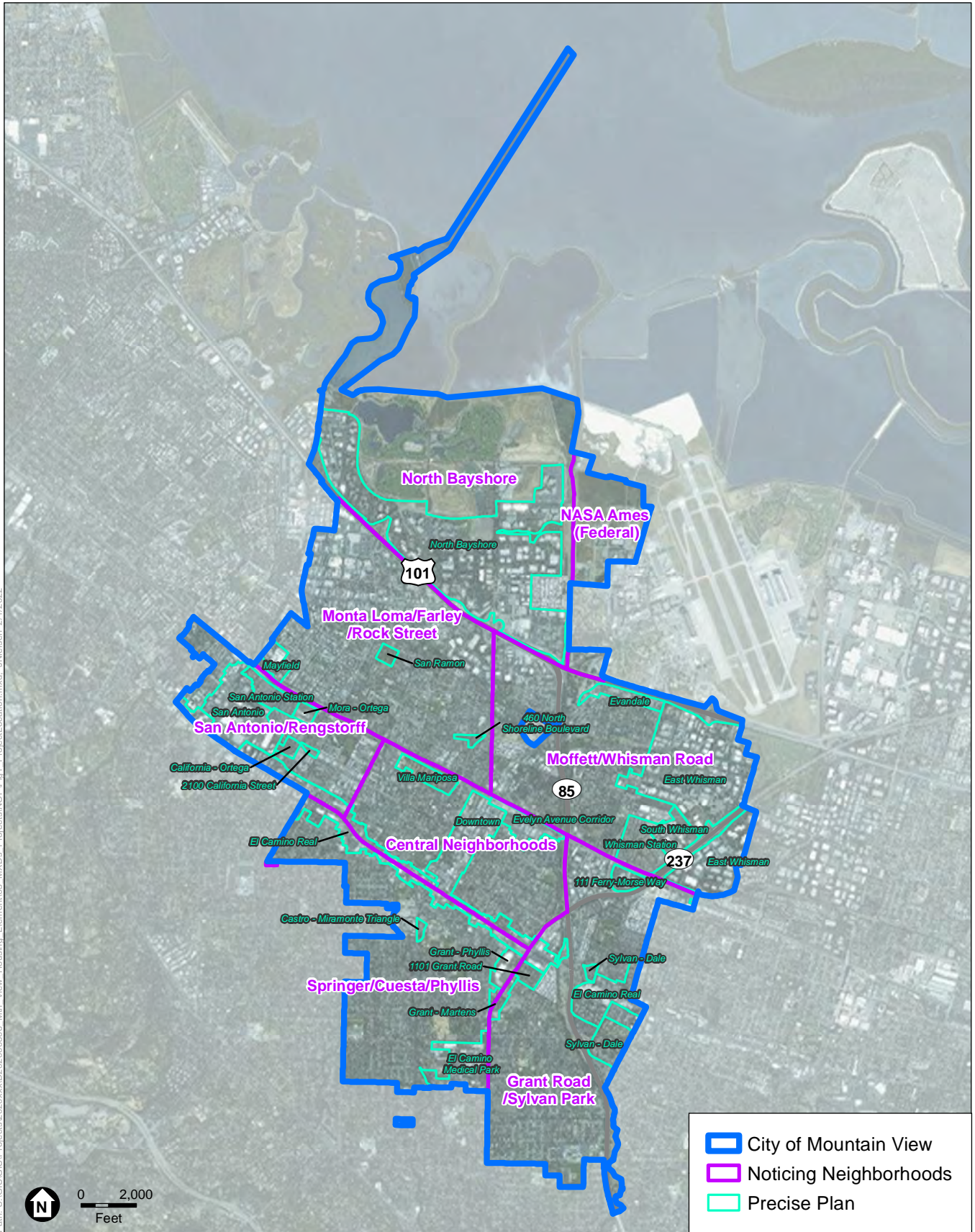
The East Whisman Precise Plan (adopted November 5, 2019, as amended through October 13, 2020) advances a sustainable, transit-oriented area with complete mixed-use neighborhoods and enhanced area mobility in an approximately 412-acre area on the eastern border of the City. It includes land use and development regulations for up to 2 million square feet of net new office uses, 100,000 square feet of retail uses, 200 hotel rooms, and 5,000 multi-family residential units (with goal of making 20 percent of the total residential units affordable).

North Bayshore Precise Plan

The North Bayshore Precise Plan (adopted November 25, 2014, as amended through December 7, 2021) supports transition of an approximately 650-acre area in the northern portion of the City into an innovative, sustainable, and complete mixed-use district that protects and stewards biological habitat and open space, and continues its role as a major high-technology employment center. The original North Bayshore Precise Plan did not include residential uses, but updates to the development standards and design guidelines of the plan adopted in December 2017 added residential uses in the areas designated for mixed-use development. The North Bayshore Precise Plan provides a vision and guiding principles, development standards, and design guidelines for up to 9,850 new multi-family residential units and 3.6 million square feet of office and commercial development. The North Bayshore Precise Plan has a target of approximately 20 percent of residential units being affordable.

El Camino Real Precise Plan

The El Camino Real Precise Plan (adopted November 17, 2014, as amended through April 13, 2021) provides planning priorities, development regulations, and an implementation strategy for the 3.9-mile stretch of the El Camino Real that runs through Mountain View. The El Camino Real Precise Plan contains direction for potential street improvements, and implementation actions, standards and guidelines for new residential densities and focused commercial areas.



SOURCE: ESRI, 2021.

City of Mountain View Housing Element Update



Figure 3-2
Neighborhoods and Precise Plan Locations

San Antonio Precise Plan

The San Antonio Precise Plan (adopted December 2, 2014, as amended through November 17, 2020) guides the transformation of the existing regional commercial area into a mixed-use core within a broader existing residential neighborhood, taking into account the area's proximity to transit services and location along two of the most heavily traveled corridors in the City: El Camino Real and San Antonio Road. The San Antonio Precise Plan identifies planning principles and policies, development regulations, mobility improvements and an implementation strategy for approximately 123 acres of land including and surrounding the San Antonio Center shopping area. It also includes allowances for higher densities of housing, and an office cap of 600,000 square feet.

3.3.2 Housing Element Requirements

State law requires that the City's Housing Element be updated by January 31, 2023 and that it contain specific contents, including: an updated assessment of housing need; updated goals, policies, and programs; and an inventory or list of housing sites at sufficient densities to accommodate a specific number of units at various levels of affordability assigned to the City by the Association of Bay Area Governments (ABAG). ABAG assigns unit amounts to Bay Area jurisdictions based on a regional housing production target set by the California Department of Housing and Community Development (HCD). This assignment is referred to as the Regional Housing Needs Allocation (RHNA).

The City's existing 5th Cycle Housing Element for the period from 2015 to 2023 includes a housing sites inventory sufficient to accommodate the 2015 RHNA allocation of 2,926 units. In the 2018 annual progress report (APR), the City utilized the recently-updated North Bayshore Precise Plan to replace lower and moderate income sites lost to redevelopment, as well as to create a significant buffer. A buffer is necessary to ensure that if one or more of the identified sites are developed at lower densities than projected, or with non-housing uses, the inventory maintains sufficient capacity to provide an ongoing supply of sites for housing during the eight-year planning period/cycle of the Housing Element. If there were no buffer and an identified site developed with a non-housing project or developed at a density less than that anticipated in the Housing Element, then the City could be obliged to identify new sites and amend the Housing Element prior to the end of the cycle.

The need for a substantial buffer is even more important during the 6th Cycle Housing Element Update because of new rules in the Housing Accountability Act's "no net loss" provisions. California State Senate Bill 166 (2017) required that the land inventory and site identification programs in the Housing Element always include sufficient sites to accommodate the unmet RHNA. This means that if a site is identified in the Housing Element as having the potential for housing development that could accommodate lower-income units is actually developed with units at a higher income level, then the locality must either identify and rezone, if necessary, an adequate substitute site or demonstrate that the land inventory already contains an adequate substitute site. An adequate buffer will be critical to ensure that the City remains compliant with these provisions without having to identify and rezone sites prior to the end of the housing cycle in early 2031.

On December 16, 2021, ABAG adopted the Final RHNA, which distributed the regional housing need of 441,176 units across all local jurisdictions in the nine-county Bay Area. Each jurisdiction's RHNA includes an allocation of housing need (units) in four income-based categories: very low income, low income, moderate income, and above moderate income. The four categories are defined based on the household's percentage of Area Median Income (AMI). Specifically, very low income units accommodate households at 0-50 percent of AMI, low income units accommodate households at 51-80 percent of AMI, moderate income units accommodate households at 81-120 percent of AMI, and above moderate income units accommodate households at greater than 120 percent of AMI. As a point of reference, Santa Clara County's 2021 Area Median Income (AMI) for a household of four persons is \$151,300.

City's HEU must plan for its RHNA allocation of housing units by income group, and a buffer is recommended by HCD to ensure that sufficient capacity exists in the Housing Element to accommodate the RHNA throughout the planning period. **Table 3-2** shows the City's RHNA across the four income categories.

**TABLE 3-1
MOUNTAIN VIEW REGIONAL HOUSING NEEDS ALLOCATION
6TH HOUSING ELEMENT CYCLE (2023-2031)**

	Very Low Income Units (0-50% AMI)	Low Income Units (51-80% AMI)	Moderate Income Units (81-120% AMI)	Above Mod Units (>120% AMI)	Total New Units
6 th Cycle RHNA	2,773	1,597	1,885	4,880	11,135
% of Total	25%	14%	17%	44%	100%

SOURCE: Association of Bay Area Governments (ABAG), *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031* adopted December 2021.

The 11,135 total housing units required in the 6th Cycle RHNA are substantially higher than the City's 5th Cycle RHNA of 2,926 units in part because the Bay Area region's overall allocation of 441,176 units from HCD is more than double the last Housing Element cycle's allocation, which was approximately 189,000 units.

The HEU is required to identify housing sites to meet the City's RHNA at specified levels of affordability. HCD recommends that jurisdictions plan for their RHNA *plus* a buffer of additional units equivalent to 15-30 percent. To be conservative, the City intends to identify a buffer of at least 20 to 30 percent of units at all income levels and a total unit capacity of up to approximately 15,000 units. Inclusion of a generous buffer is in the City's interest because:

- As the analysis of the Housing Element Update progresses through the preparation and adoption process, sites may be modified or removed from the inventory; and
- A generous buffer would avoid the need to identify and potentially rezone additional sites if one or more sites included in the Housing Element to accommodate lower or moderate income housing later develops with fewer such units during the eight year planning period.

While a significant number of identified sites will already have adequate Zoning for the units identified, the City is also choosing to rezone some of the identified sites and amend applicable Precise Plans to create the desired buffer proposed in the inventory (the rezonings are not necessary to meet the RHNA). Over the course of the 6th Cycle, the City's buffer may be exhausted and the City may need to amend the General Plan Map, the Zoning Map, and the Zoning Ordinance to accommodate any shortfalls. As noted below in Section 3.4, the number of sites likely to require rezoning represents a small percentage of the total inventory.

While State law requires the Housing Element to include an inventory of housing sites and requires the City to appropriately zone sites for multifamily housing, the City is not required to actually develop/construct housing on these sites. Future development on identified sites would be at the discretion of individual property owners and would be largely dependent on market forces and -- in the case of affordable housing -- available funding and/or other incentives. Nonetheless, this EIR considers potential impacts of development that may result from adoption of the HEU, focusing on proposed actions to encourage housing production such as changes in allowable densities, changes in development standards, and adoption of incentives.

3.4 Project Description

The Project analyzed in this EIR would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan.

The Housing Element itself would contain:

- An updated housing needs assessment;
- Updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing;
- A housing inventory that meets the City's RHNA and provides a buffer of additional housing development capacity.

The Project would also include modifications to provisions in the City's General Plan land use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory, which is described below.

3.4.1 Housing Needs Assessment & Updated Goals, Policies, and Programs

The proposed Project would adopt updated goals, policies, and programs to address the maintenance, preservation, improvement, and development of housing and to affirmatively further fair housing in the City. Proposed updates to the goals, policies, and programs in the 5th Cycle Housing Element were informed by a review of the implementation and effectiveness of that document, as well as updated information on demographic and economic trends, existing housing and market conditions, and special housing needs experienced by disabled persons, elderly households, large family households, single female-headed households, and homeless

persons. The proposed goals, policies, and programs were also crafted to address an updated assessment of non-governmental and governmental constraints to the development, conservation, and rehabilitation of housing in the City, and to affirmatively further fair housing. For more information, including the definition of these terms, and the proposed updates to goals, policies, and programs, please see the HCD Draft Housing Element Update available on the City's website at <https://www.mvhousingelement.org/> and included as **Appendix B**.

3.4.2 Housing Sites Inventory

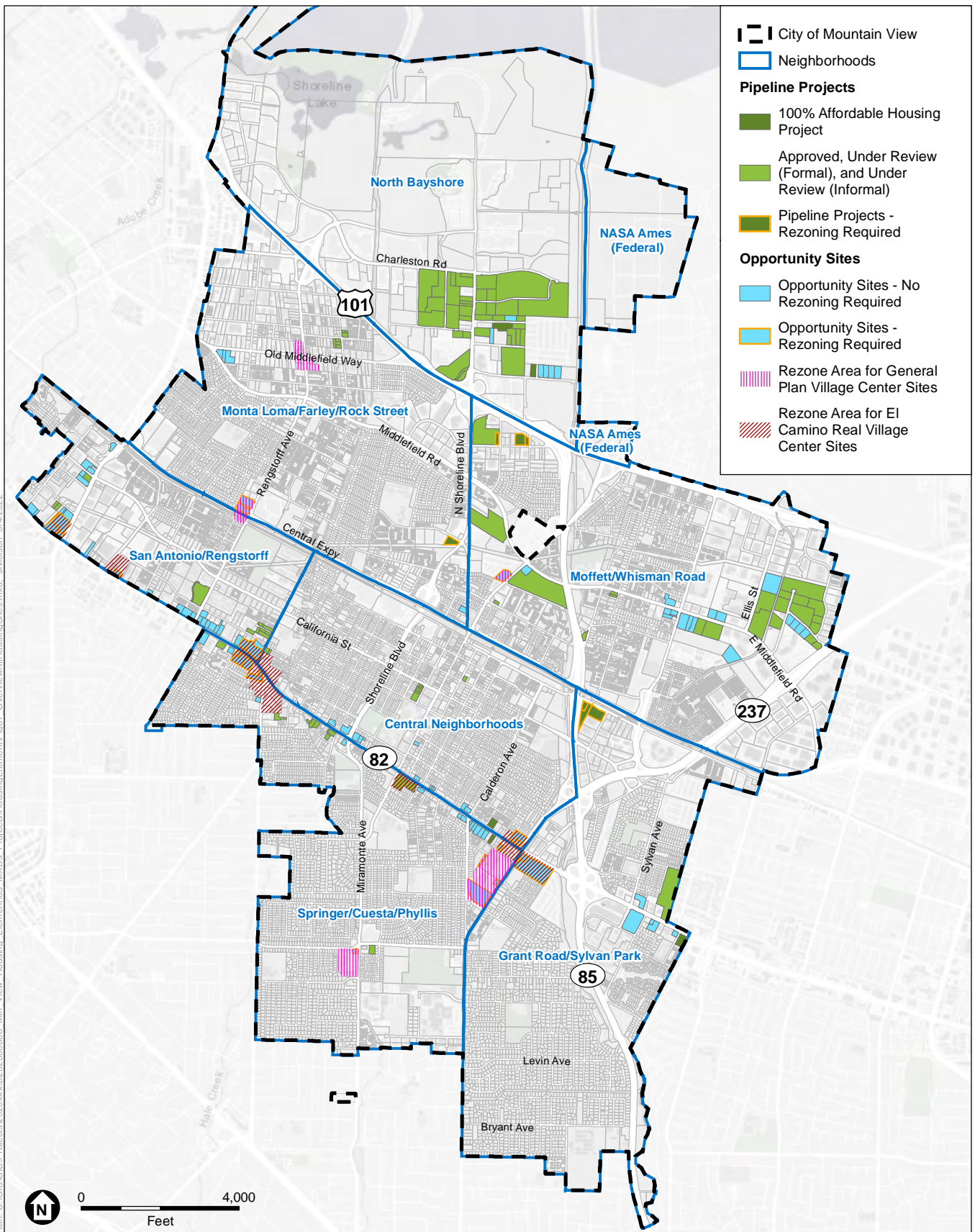
The proposed Project would address the requirements for a housing inventory and meet the City's 6th Cycle RHNA plus a buffer via a number of strategies as provided for in State law and HCD guidance. See **Figure 3-3** for an overview of housing site locations included in the HEU.

Existing Zoning and General Plan Capacity

Pipeline Projects. The City has approved a number of housing and mixed-use projects that are likely to result in production of multifamily housing during the housing element planning period. The City also has active applications on file for single family and multifamily housing and/or mixed use developments that may be approved, constructed, and occupied during the housing element planning period. These types of "pipeline projects" would count towards the City's RHNA, and could collectively total at least 8,600 units by 2031, not including pipeline rezoning projects (described below).

Accessory Dwelling Units. The City may assume that the development of accessory dwelling units (ADUs) during the planning period is equivalent to that in recent years. Based on information contained in the City's annual production reports to HCD, approximately 96 ADUs are assumed over the eight year planning period.

Existing Opportunity Sites. The City's existing precise plans, General Plan Land Use designations, and zoning permit a range of residential densities in different areas of the City that can accommodate development of multifamily housing without adjustment. A preliminary analysis estimates that there may be sufficient sites to accommodate approximately 4,700 units. Most of these sites are within Precise Plan areas, including El Camino Real, San Antonio, North Bayshore, and East Whisman, although there are sites identified for inclusion in the inventory in other areas of the City as well. See Figure 3-2 for a map showing City neighborhoods and precise plan locations.



SOURCE: ESRI, 2022.

City of Mountain View Housing Element Update

Figure 3-3
Housing Site Locations Overview



General Plan, Zoning and Precise Plan Amendments

Pipeline Sites Requiring Rezoning and General Plan Amendment. There are a limited number of sites that could accommodate multifamily housing – and in some cases specifically affordable housing for lower income households – if rezoned to allow residential use at appropriate densities. These sites, which include development projects under review and under discussion are located at, 1265 Montecito Avenue, 1020 Terra Bella Avenue, 1010 Linda Vista Avenue and East Evelyn Avenue between Highway 85 and Pioneer Way, and could accommodate approximately 580 units.

Rezoning Adopted with the Housing Element. The City proposes to adopt Zoning and Precise Plan Amendments concurrent with this Housing Element Update, to clarify standards for allowed uses and densities at General Plan Village Centers and El Camino Real Village Centers. These amendments accommodate approximately 800 units in the site inventory, but the total additional capacity of these areas is greater – approximately 2,500 units¹.

Opportunity Sites Requiring Rezoning and/or General Plan Amendments (“Back-Pocket” Areas). In the event that the above opportunities are inadequate to accommodate the RHNA, either at the time of Housing Element adoption or over the course of the 6th Cycle due to the “no net loss” law, the proposed Housing Element will also include programs to adopt additional rezonings and General Plan amendments in targeted urban infill areas (areas on previously developed sites and/or completely surrounded by urban uses):

- Moffett Boulevard
- Other shopping areas, such as Leong Drive, Bailey Park shopping center, Monta Loma Plaza
- A Joint Development at the Mountain View Transit Center
- Other non-residential sites south of El Camino Real, such as 1949 Grant Road and offices near Blossom Valley Shopping Center

These rezoning opportunities could accommodate approximately 1,000 additional units, depending on the densities adopted.

Total Inventory. This EIR analyzes the impacts associated with the site inventory to 2031, an increase in approximately 15,000 dwelling units, focused primarily along the commercial corridors and in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing.² Of this, approximately 13,600 units³ are already allowed under the City’s adopted General Plan, zoning, and Precise Plans and the remaining 1,400 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately

¹ This number is less than the total amount of units that could be allowed across these sites, since it is unreasonable to assume replacement of all existing uses over the horizon of this study. The number does consider the sites most likely to be redeveloped.

² The actual site inventory in the current draft is closer to 14,800. However, 15,000 is a conservatively large round number and small changes to the site inventory are expected up to adoption, based on newly submitted applications.

³ Approximately 13,400 units in the current draft. See previous footnote.

2,700 units beyond 2031 (described in detail above). More information is provided in Section 3.4.3 below.

Future development on identified sites would continue to be at the discretion of individual property owners and will be largely dependent on market forces and -- in the case of affordable housing -- available funding and/or other incentives. Nonetheless, the analysis in this EIR conservatively assumes build-out of the sites inventory within the eight year planning period ending in January 2031, as discussed further in Section 3.4.3 below.

3.4.3 Growth Projections

As a program-level EIR, this EIR presents an analysis of potential impacts of the HEU by assessing proposed policy and zoning/Precise Plan changes and does not contain a site-specific analysis of development that may occur following adoption of the HEU.

Use of growth projections as a basis for analysis is appropriate when the project being analyzed is a proposed plan, and provides an envelope for the analysis of potential impacts. This approach recognizes that it is not possible to predict the details of development that may be proposed for construction on any individual site once the HEU is adopted. Also, as stated earlier, the precise location of housing inventory sites and densities may evolve based on public outreach during preparation of this EIR.

The HEU is planning for the period from January 31, 2023 through January 31, 2031, and is expected to plan for approximately 15,000 new housing units within this period, although the actual pace of development will depend on market conditions, property owner interest, and other factors. Also, of the approximately 15,000 new units, only a small percentage would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. However, development of these units may be accelerated compared to the theoretical No Project scenario, due to programs in the Housing Element that streamline, incentivize or remove constraints for housing.

The Project scenario has an analysis year of 2031, since that is the horizon of the Housing Element, and all the site inventory units are expected to be built by that time. In addition, a cumulative scenario is also studied, which looks at the difference between the buildout of the City without and with the proposed General Plan, Zoning and Precise Plan Amendments. This includes anticipated growth beyond 2031. **Table 3-2** below presents growth projections used in this analysis, and shows the amount of growth attributable to the Project and to cumulative growth and development.

**TABLE 3-2
MOUNTAIN VIEW GROWTH PROJECTIONS FOR 2040**

	Existing Baseline (2020)	Under Construction	Proposed HEU (2021-2031)	2031 Conditions with Proposed HEU	Cumulative Growth no HEU	HEU Contribution to Cumulative Growth ³	Cumulative Growth with HEU
Dwelling Units	37,820	1,847	15,000	54,700	63,000	4,100	67,100
Population ¹	82,826	3,740	30,000	116,600	134,000	8,200	142,200
Jobs	101,965	8,800	0 ²	120,000	133,000	0 ²	133,000

NOTES:

¹ Assumes an average of 2 persons per housing unit, based on the City's projections.

² Job growth is considered as background and is not part of the proposed HEU

³ Includes the Project's contribution due to Rezoning and General Plan Amendments considered as part of the HEU.

SOURCE: City of Mountain View, March 2022.

As shown in Table 3-2, adoption of the HEU would potentially result in 4,100 more dwelling units in the cumulative growth capacity than would otherwise occur. This is due to the additional development potential that would be created the General Plan, Zoning and Precise Plan Amendments described in Section 3.4.1, Housing Sites Inventory, above (about 1,400 units in the site inventory and about 2,700 units beyond 2031). The balance of the units included in the proposed HEU represent existing development potential that is already reflected in the City's cumulative growth capacity.

3.4.4 Other Elements of the General Plan

In addition to the amendments that would take place within the General Plan's Housing Element, the City is concurrently adopting amendments to the General Plan Land Use Map to reflect changes in density and land use designations of sites that are included in the housing sites inventory. These include:

- Amend the General Plan Map at 1010 Linda Vista Avenue (APN 153-15-011) from General Industrial to High Density Residential
- Amend the General Plan Map at 57 through 87 East Evelyn Avenue (APNs 160-65-002, 160-65-008 and 160-65-009) from High Intensity Office to High Density Residential

3.4.5 Zoning Map Amendments

The City is also concurrently adopting amendments to its Zoning Map to reflect changes in density of sites that are included in the housing sites inventory. These include:

- Amend the Zoning Map at 1010 Linda Vista Avenue (APN 153-15-011) from MM to R4
- Amend the Zoning Map at 57 through 87 East Evelyn Avenue (APNs 160-65-002, 160-65-008 and 160-65-009) from MM to R4

3.4.6 Zoning Ordinance Amendments

The City is also concurrently adopting amendments to its Zoning Code to reflect and facilitate changes in density of sites that are included in the housing sites inventory. These include:

- Amend the R4 zone to allow lot sizes less than 1 acre at 100% affordable developments
- Amend the Commercial Zones (CN and CS) to allow residential uses, with the following stipulations:
 - Residential uses are only allowed within “mixed-use” designations in the General Plan.
 - Projects must provide minimum retail or similar neighborhood-serving uses as determined by an analysis of typical amounts of such uses in the underlying zone.
 - Street frontages shall be primarily lined with commercial (retail/neighborhood-serving) uses.
 - At least one public gathering/open space/plaza shall be provided, with a minimum area to be determined based on site size. Provide potential exemptions to one or more standards to facilitate provision of open space to maintain residential density.
 - Residential uses shall use the development standards of the R3 Zoning District, CRA Zoning District, or El Camino Real Precise Plan, depending on the allowed density in the General Plan.

3.4.7 Precise Plan Amendments

The City is also concurrently adopting amendments to two Precise Plans to reflect and facilitate changes in density of sites that are included in the housing sites inventory. These include:

- Amendments to the El Camino Real Precise Plan to allow “Tier 1” approvals for residential projects up to 2.3 FAR in Village Centers and eliminating the “Tier 2” (overlay zoning) requirement for those projects.
- Amendments to the Grant/Phyllis Precise Plan to allow residential uses, with the following stipulations:
 - Projects must provide minimum retail or similar neighborhood-serving uses consistent with the amount existing in the Plan area.
 - Street frontages shall be primarily lined with commercial (retail/neighborhood-serving) uses.
 - At least one public gathering/open space/plaza shall be provided, with a minimum area to be determined based on site size. Provide potential exemptions to one or more standards to facilitate provision of open space to maintain residential density.
 - Residential uses shall use the development standards of the El Camino Real Precise Plan.

3.5 Project Objectives

CEQA *Guidelines* Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

“A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.”

The primary purpose of the HEU is to comply with the requirements of State law by analyzing existing and projected housing needs, and updating goals, policies, objectives, and implementation programs for the preservation, improvement, and development of housing. The proposed Project is intended to ensure the City’s conformance with State housing requirements and seeks to:

- Protect existing housing;
- Encourage new housing for households at all income levels and for households with a range of diverse housing needs;
- Remove undue constraints on new housing development, including for affordable housing development;
- Affirmatively further fair housing; and
- Identify specific sites that could accommodate required housing units to meet the City’s RHNA.

Conducting community engagement and soliciting feedback to inform the contents of the HEU is a critical component of the planning process and will help to shape the HEU that is ultimately adopted by the City Council.

3.6 Intended Uses of this EIR

Because the Housing Element establishes policies, goals and guidelines, and describes potential housing development that may or may not be built on any particular site, environmental review of the HEU will necessarily be general. The CEQA *Guidelines* instruct that environmental review of a planning-level document need not contain the level of detail required for review of a specific construction project, for example. (CEQA *Guidelines*, Section 15146 (“[t]he degree of specificity required ... will correspond to the degree of specificity involved in the underlying activity”).

The Housing Element’s inventory of sites is a State-mandated requirement to ensure that the City’s RHNA can be accommodated. In other words, the housing inventory demonstrates that there is enough land zoned at appropriate densities to accommodate the RHNA allocation. However this inventory does not include all potential development sites within the City limits, and does not mean that sites in the inventory will be developed at the allowable densities. In addition, information about the design and placement of buildings on the sites will not be available unless/until a specific development is proposed.

Future discretionary development proposals will be reviewed to determine whether their impacts fall within the scope of the analysis in this EIR and additional site-specific environmental review will be required if new significant impacts would result. As provided for in CEQA Guidelines Sections 15152 and 15385, any subsequent environmental document that might be required could “tier” from this EIR and focus its analysis on any new potentially significant impacts.

3.6.1 Required Approvals

While the City’s proposed HEU is subject to review and certification by HCD, adoption and implementation of the HEU would require a series of interrelated planning and regulatory approvals by the City of Mountain View, as Lead Agency. Specifically, the City would take the following approval actions:

- Certification of the HEU EIR pursuant to CEQA;
- Adoption of a resolution amending the General Plan to update the Housing Element, and make any corresponding changes to other elements of the General Plan needed to maintain internal consistency and comply with State law;
- Adoption of an ordinance (two readings) amending the City’s zoning ordinance, and the City’s zoning map if/as needed to reflect the location and density of land uses permitted by the General Plan amendment.
- Adoption of resolutions amending applicable precise plans if/as needed to reflect the location and density of land uses permitted by the General Plan amendment.

All of these proposed actions would require review and recommendation by the Environmental Planning Commission, followed by consideration and action by the City Council.

3.6.2 Other Governmental Agency Approvals

As the Lead Agency and as appropriate under CEQA, the City also intends the EIR to serve as the CEQA-required environmental documentation for consideration of the HEU by other Responsible Agencies and Trustee Agencies which may have discretionary approval authority over the HEU or related actions. Under the CEQA *Guidelines*, the term “Responsible Agency” includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR (CEQA Guidelines Section 15381); and the term “Trustee Agency” means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California (Section 15386). Responsible Agencies and Trustee Agencies with approval actions associated with the project may include, but are not limited to, the following:

- California Department of Transportation (Caltrans)
- Santa Clara Valley Transportation Authority (VTA)
- California Department of Motor Vehicles

3.7 References

Association of Bay Area Governments (ABAG), 2021. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031*, Adopted December 16, 2021.

Available at: https://abag.ca.gov/sites/default/files/documents/2021-12/proposed%20Final_RHNA_Allocation_Report_2023-2031.pdf. Accessed December 22, 2021.

California Department of Housing and Community Development (HUD) 2021. *Revised State Income Limits for 2021*, December 31, 2021.

City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021. Available at: <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10702>. Accessed January 21, 2022.

City of Mountain View, 2014. *City of Mountain View 2015-2023 Housing Element, Adopted October 14, 2014*. Available at: <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=15284>. Accessed January 21, 2022.

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CHAPTER 4

Environmental Setting, Impacts, and Mitigation Measures

4.0 Introduction to the Environmental Analysis

This program environmental impact report (EIR) evaluates and documents the physical environmental effects that would potentially occur with the implementation of the proposed Housing Element Update (Project) in accordance with the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Sections 21000, et seq., and the Guidelines for the California Environmental Quality Act (CEQA Guidelines), California Code of Regulations, Title 14, Chapter 3, Section 15000, et seq.).

Sections 4.1 through 4.16 in this chapter consider the existing conditions, regulatory background, and environmental impacts associated with implementation of the Project, as well as mitigation measures to reduce the impact of Project-specific and cumulative environmental impacts, and the level of significance of impacts following mitigation.

This EIR is a Program EIR, as provided for in CEQA Guidelines Section 15168 and will allow the City “to consider broad policy alternatives and program wide mitigation measures” as noted in Section 15168(b)(4). Section 15168(a) of the CEQA Guidelines states that a Program EIR is appropriate for projects which are “... a series of actions that can be characterized as one large project and are related either:

1. Geographically;
2. A logical part in the chain of contemplated actions;
3. In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
4. As individual activities carried out under the same authorizing statutory or regulating authority and having generally similar environmental effects which can be mitigated in similar ways.”

Future discretionary actions that would be facilitated by the HEU’s adoption, particularly those related to the development of housing, would generally require additional assessment to determine consistency with the analysis provided in this Program EIR. The potential future actions would also be subject to the mitigation measures established in this Program EIR, unless superseded by a subsequent environmental document prepared to analyze environmental impacts not foreseen in this Program EIR.

4.0.1 Definition of Terms Used in this EIR

This EIR uses a number of terms that have specific meaning under CEQA. Among the most important of the terms used in the EIR are those that refer to the significance of environmental impacts. The following terms are used to describe environmental effects of the Project:

- **Significance Thresholds:** A set of standards used by the lead agency to determine whether an impact would be considered significant. (See CEQA Guidelines Section 15064.7.) Standards of significance used in this EIR were derived from Appendix G of the CEQA Guidelines unless otherwise noted. In determining the level of significance, the analysis assumes that the Project would comply with relevant federal, State, and local regulations and ordinances.
- **Significant Impact:** A Project impact is considered significant if the Project would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of Project-related physical changes compared to specified significance thresholds, which may be qualitative or quantitative. A significant impact is defined as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (CEQA Guidelines Section 15382).
- **Less-than-Significant Impact:** A Project impact is considered less than significant when the physical change caused by the project would not exceed the applicable significance threshold.
- **Significant and Unavoidable Impact:** A Project impact is considered significant and unavoidable if it would result in a substantial adverse physical change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
- **Cumulative Impact:** Under CEQA, a cumulative impact refers to “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). A significant cumulative impact is one in which the cumulative adverse physical change would exceed the applicable significance criterion and the Project’s contribution is “cumulatively considerable” (CEQA Guidelines Section 15130(a)).
- **Mitigation Measure:** A mitigation measure is an action that could be taken to avoid or reduce the magnitude of a significant impact. Section 15370 of the CEQA Guidelines defines mitigation as:
 - a. Avoiding the impact altogether by not taking a certain action or parts of an action;
 - b. Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
 - e. Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements.

4.0.2 Section Format

Chapter 4 is divided into technical sections (e.g., Section 4.1, *Aesthetics*) that present the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment for each environmental resource issue area. Where required, potentially feasible mitigation measures are identified to lessen or avoid potentially significant impacts. Each section includes an analysis of project-specific and cumulative impacts for each issue area.

The resource topic areas addressed in this EIR chapter are listed below, and the abbreviations for each resource topic that are used in the naming of impact statements and mitigation measures are shown in parentheses:

- Section 4.1: Aesthetics (AES)
- Section 4.2: Air Quality (AIR)
- Section 4.3: Biological Resources (BIO)
- Section 4.4: Cultural Resources and Tribal Cultural Resources (CUL & TCR)
- Section 4.5: Energy (ENE)
- Section 4.6: Geology, Soils, Paleontological and Mineral Resources (GEO)
- Section 4.7: Greenhouse Gas Emissions (GHG)
- Section 4.8: Hazards and Hazardous Materials (HAZ)
- Section 4.9: Hydrology and Water Quality (HYD)
- Section 4.10: Land Use and Planning (LUP)
- Section 4.11: Noise and Vibration (NOI)
- Section 4.12: Population and Housing (POP)
- Section 4.13: Public Services and Recreation (PSR)
- Section 4.14: Transportation and Circulation (TRA)
- Section 4.15: Utilities and Service Systems (UTL)
- Section 4.16: Effects Found Not to Be Significant

The technical environmental sections each begin with a description of the Project's **environmental setting** and the **regulatory setting** as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the Project and Project alternatives. The environmental setting discussion addresses the conditions that existed at the time of issuance on the EIR's Notice of Preparation (NOP) in February 2022 and prior to implementation of the Project. This setting establishes the baseline by which the Project and Project alternatives are measured for environmental impacts. The regulatory setting presents relevant information about federal, state, regional, and/or local laws, regulations, plans or policies that pertain to the environmental resources addressed in each section.

Next, each section presents **significance criteria**, which identify the standards used by the City to determine the significance of the environmental effects of the Project.

An **approach to analysis** discussion in each section presents the analytical methods and key assumptions used in the evaluation of effects of the Project, and is followed by an **impacts of the Project** discussion. The impacts of the Project portion of each section includes impact statements, prefaced by a number in bold-faced type. An explanation of each impact is followed by an analysis of its significance. The subsection concludes with a statement that the impact, following implementation of the mitigation measure(s) and/or the continuation of existing policies and regulations, would be reduced to a less-than-significant level or would remain significant and unavoidable.

The analysis of environmental impacts considers potential impacts of the actions described as the “Project” in Chapter 3, *Project Description*, including potential impacts of future construction and occupancy of housing planned for in the HEU. As required by Section 15126.2(a) of the CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or off-site impacts are addressed, as appropriate, for the environmental issue area being analyzed. Under CEQA, economic or social changes by themselves are not considered to be significant impacts, but may be considered in linking the implementation of a project to a physical environmental change, or in determining whether the physical change is significant.

Where enforcement exists and compliance can be reasonably anticipated, this EIR assumes that the Project would meet the requirements of applicable laws and other regulations.

Mitigation measures pertinent to each individual impact, if available, appear after the impact discussion section. The magnitude of reduction of an impact and the potential effect of that reduction in magnitude on the significance of the impact is also disclosed. An example of the format is shown below using the topic of air quality (AIR).

Impacts and Mitigation Measures

Impact AIR-1: Impact Statement.

A discussion of the potential impact of the Project on the resource is introduced in paragraph form. To identify impacts that may be site- or Project element-specific, where appropriate, the discussion differentiates between construction effects and operational effects. A statement of the level of significance before application of any mitigation measures is provided in **bold**.

Mitigation Measure

If the impact is determined to be less than significant, the text will say, “None required.” If the impact is determined to be significant or potentially significant, mitigation with be included in the following format:

Mitigation Measure AIR-1: Mitigation Measure Title.

Recommended mitigation measure, numbered in consecutive order.

Where appropriate, one or more potentially feasible mitigation measures are described. A statement of the significance of the impact following implemented mitigation measure(s) is included in **bold**, with an explanation of the measure(s) effectiveness if necessary.

4.0.3 Cumulative Impacts

An analysis of cumulative impacts follows the Project-specific impacts and mitigation measures evaluation in each section, and starts by describing the geographic context in which cumulative impacts are analyzed.

A cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other past, present and reasonably foreseeable projects causing related impacts (15355). Per CEQA Guidelines Section 15130(b)(1), cumulative impacts may be analyzed using either a “list of past, present, and probable future projects” or “a summary of projections contained in an adopted local, regional, or statewide plan or related planning document.” This EIR primarily uses the projections-based approach, as explained here.

The proposed HEU is a plan which provides the potential for increased residential development in specific locations across a broad geography. The use of growth projections as a basis for a cumulative analysis is appropriate when the project being analyzed is a proposed plan that involves a broad geography because specific information about development that may occur as a result of the plan is not available and other changes within and outside the planning area cannot be predicted with any specificity. In this case, the amount of development anticipated in the Housing Sites Inventory portion of the HEU is used to analyze Project impacts, but specific information about how and when those sites might develop is not available. Even the precise location of housing inventory sites and densities may evolve based on public outreach and the results of the sites analysis that will be conducted in parallel to preparation of this EIR.

Thus, this EIR analyzes Project-related growth in housing combined with other, cumulative growth using projections from *Plan Bay Area 2040*, which was the Bay Area’s Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) until *Plan Bay Area 2050* was adopted in October 2021. *Plan Bay Area 2050* is not used because the plan is awaiting CARB’s determination and it does not at this point contain growth projections specific to individual jurisdictions. It will likely take up to three years for the regional agencies to develop a detailed growth forecast for *Plan Bay Area 2050* and integrate that forecast into MTC’s transportation model, after which updates to each county’s transportation model will be required. Thus *Plan Bay Area 2040* represents the best available source of information to form the foundation for long range population, housing and employment projections.

Table 4.0-1 summarizes the levels of housing and employment that is projected with and without adoption of the City’s HEU and summarizes 2040 projections for housing units and employment in the City and the nine-county Bay Area. These projections are inherent in the county transportation model and form the foundation for the cumulative analyses in this EIR.

**TABLE 4.0-1
2040 HOUSING AND EMPLOYMENT PROJECTIONS WITH AND WITHOUT THE CITY OF MOUNTAIN VIEW HEU^a**

	2020	2040	Growth 2020 to 2040
Dwelling Units - No HEU			
City of Mountain View	37,820	63,000	25,180
Santa Clara County per Plan Bay Area 2040	706,565	881,655	175,090
Bay Area Region per Plan Bay Area 2040	2.88 M	3.43 M	544,735
Dwelling Units - With HEU			
City of Mountain View with the HEU ^a	37,820	67,100	29,280
Santa Clara County with the HEU	706,565	885,755	179,190
Bay Area Region	2.88 M	3.43 M	548,835
Jobs			
City of Mountain View ^a	110,765	133,000	22,235
Santa Clara County	1,120,420	1,289,870	169,450
Bay Area Region	4.14 M jobs	4.70 M jobs	562,185

NOTES:

^a Dwelling units in the City reflect City data, rather than data in Plan Bay Area 2040, consistent with Table 3-2 in Chapter 3, *Project Description*. Growth with the HEU includes additional capacity created by general plan amendments, zoning amendments and precise plan amendments, whether or not it is in the site inventory. Housing growth anticipated as a result of the HEU has also been used to adjust the Plan Bay Area 2040 projections for Santa Clara County.

SOURCE: City of Mountain View and Metropolitan Transportation Commission/Association of Bay Area Governments, *Plan Bay Area 2040*, Final plan adopted July 26, 2017.

Of course, the City is not the only Bay Area jurisdiction that has received a RHNA allocation and is engaged in updating its housing element. All other local jurisdictions in Santa Clara County are doing the same, as are other local jurisdictions throughout the Bay region. However, based on past experience, it is highly unlikely that all of the units that are planned for in each housing element will be constructed between 2022 and 2040, and therefore using that total RHNA number for the region as the basis for the cumulative effects analysis would substantially overstate the level of impact. For this reason, and to more realistically assess the level of impact that could be reasonably foreseen during the HEUs planning period, for all jurisdictions other than the City, this EIR considers the regional projections presented in *Plan Bay Area 2040* as a reasonable estimate of likely new housing construction and population and employment growth through 2040 despite planning efforts underway in other jurisdictions to address their housing needs.

There are, however, a number of ongoing activities that inform the cumulative analysis in this EIR, including the City's ongoing Downtown Precise Plan Update, and other City development project applications, as described below.

Downtown Precise Plan Update

In December 2019, the City Council authorized city staff to update three sub-areas of the Downtown Precise Plan, including A, H, and G. The updates are focused on strengthening the existing character of Downtown Mountain View and promote active

ground-floor uses, through design standards, guidelines, and minor land use changes to administrative office uses.

Senate Bill (SB 9) Code Amendments

SB 9 requires ministerial approval of a proposed housing development containing two residential units on a single-family residential zoned (R1 zone) property if the proposed development meets certain standard requirements (referred to as “duo developments”). SB 9 also requires ministerial approval of a lot subdivision in a single-family residential zone (R1 zone) if it meets certain lot requirements (these are referred to as “urban lot splits”). The City approved text amendments to the City Code to be consistent with SB 9 in March 2022.

Development Projects in the City

The City has approved or has pending applications on file for a number of projects that may be developed in the City between now and 2040 that are not included in the housing development pipeline. These include, but are not limited to those listed in **Table 4.0-2**.

With very few exceptions, these projects are employment-generating (rather than providing new housing), and some are near or adjacent to the housing inventory sites included in the HEU. The City’s cumulative projections show an increase in employment for the City, consistent with these developments, plus additional capacity available in the City. Potential cumulative impacts associated with development within the City are discussed broadly (i.e. without reference to specific projects) and qualitatively where relevant in this EIR, most notably in the consideration of potential cumulative impacts related to cultural and natural resources.

There are also a number of ongoing activities that are early in their development, so are not well enough defined to be included in the cumulative analysis, such as the City’s R3 Multi-family Residential Zoning District Update.

As noted above, where a cumulative impact is significant when compared to existing or baseline conditions, the analysis addresses whether the project’s contribution to the significant cumulative impact is “considerable.” If the contribution of the project is considerable, then the EIR identifies potentially feasible measures that could avoid or reduce the magnitude of the project’s contribution to a less-than-considerable level. If the project’s contribution is not considerable, it is considered less than significant and no mitigation of the project contribution is required (CEQA Guidelines Section 15130(a)(2)).

**TABLE 4.0-2
CUMULATIVE NON-RESIDENTIAL DEVELOPMENT PROJECTS IN THE CITY**

Project Name	Description of Project
Approved Development Projects	
600 Ellis Street	259,595 square foot office building
369 North Whisman Road (The Quad / Lovewell)	70,846 square foot office building and 109,927 square foot office building
701 West Evelyn Avenue (Marwood)	commercial building containing 6,500 square feet of ground-floor retail and 28,090 square feet of office
1860-2159 Landings Drive, 1014 - 1058 Huff Avenue, 900 Alta Avenue, 2000 North Shoreline Boulevard (Google Landings)	800,000 square foot office building
2019 Leghorn Street	12,050 square-foot office building
855 - 1023 West El Camino Real	60-bed senior memory care facility with 5,883 square feet of ground floor retail and restaurant use
2300 West El Camino Real	153-room hotel
747 West Dana Street	7,000 square feet of office and 1,600-square feet of ground-floor retail
Hope Street Lots (City Lots 4 and 8)	120,000 square foot hotel building and ground floor accessory commercial space, approximately 52,000 square foot mixed-use building
Development Projects Under Review	
756 California Street	6,997 square-foot commercial building with ground-floor retail and office above
189 North Bernardo Avenue	80,000 square foot office building
590 Castro Street	106,000 square foot office building
365 - 405 San Antonio Road and 2585 - 2595 California Street (San Antonio Center Phase III)	182,352 square foot commercial building
301 East Evelyn Avenue	125,000 square foot office building
705 West Dana Street	19,017 square foot building with 1,100 square feet of ground-floor retail and upper floor office
2110 Old Middlefield Way	gas station with 6 fueling stations, a drive-through car wash, and a 547 square foot convenience store
1057, 1059, 1061 El Monte Avenue	90-room senior care facility
1155 and 1185 Terra Bella Avenue	20,000 square foot office building
1040 Terra Bella Avenue	public storage buildings
1885 Miramonte Avenue (St. Francis High School)	add 12,800 square feet of administrative space

SOURCE: City of Mountain View, February 2022. Development Update – February 2022.
<https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=37124>.

4.1 Aesthetics

4.1.1 Introduction

This section evaluates the potential for the Project to result in substantial adverse effects related to aesthetics. The *Environmental Setting* portion of this section includes descriptions of existing conditions relevant to aesthetics. Existing plans and policies relevant to aesthetics associated with implementation of the Project are provided in the *Regulatory Setting* section. Finally, the impact discussion evaluates potential impacts related to aesthetics that could result from implementation of the Project in the context of existing conditions.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to aesthetics were received during the NOP comment period.

4.1.2 Environmental Setting

Regional Setting

The City of Mountain View is located in northwestern Santa Clara County, in the San Francisco Bay Area. The City is located in close proximity to two prominent natural features: San Francisco Bay, which is located to the north, and the pronounced ridgelines of the Santa Cruz Mountain Range, located several miles to the west and south and which provides a visual backdrop to the City. The City takes its name from the vista of the Santa Cruz Mountains. The baylands, or marshlands, are located directly to the north of the City and, together with Shoreline Park, form a buffer between Mountain View and San Francisco Bay. The City is bordered by urbanized areas on all other sides, specifically, by the City of Palo Alto to the northwest, the City of Sunnyvale to the east, and the City of Los Altos to the south and west. These cities are visually characterized by generally low-rise development, tree-lined residential streets, and corporate office parks of generally modern construction.

City of Mountain View

The City of Mountain View is generally suburban in visual character, characterized by lower-rise buildings (mostly one to two stories in height), extensive landscaping, and a low to moderate intensity of uses. The City includes several visually distinct neighborhood areas that are separated by major roadways, highways, and transit corridors, and which generally correspond with the planning areas identified in the Mountain View 2030 General Plan. Each of the City's geographic areas contains one or more commercial districts surrounded by residential land uses, with the exception of the North Bayshore area and the eastern portion of the Moffett/Whisman area, which contain predominantly office parks and light industrial and research and development uses. More dense and urban areas with taller buildings and more concentrated commercial activity are located in the Downtown area along Castro Street, as well as portions of El Camino Real. The visual characteristics of areas in the City with the highest development potential as relevant to the Project are described in more detail below.

Gateways and Landmarks

As discussed in the *Visual Resources* section of the Mountain View 2030 General Plan Environmental Impact Report (EIR), gateways are the entries to a city, district, or neighborhood. They act as a point of distinction between different areas and contribute to a sense of place by announcing a threshold or a passage into a place while also reinforcing the unique identity of that place. For the most part, gateways in Mountain View are associated with the City's major transportation corridors, particularly those which cross the jurisdictional boundaries of Palo Alto, Los Altos, and Sunnyvale. Important gateways within the City also include rail stations along the Central Expressway. Shoreline Boulevard also serves as a gateway into downtown Mountain View from U.S. Highway 101 (US 101). East and west gateways to the City exist along El Camino Real and East Evelyn Avenue. Other gateways include the convergence of Old Middlefield Way and Middlefield Road at the City border with Palo Alto, Grant Road at the border with Los Altos, and transitions between bordering cities along the Central Expressway.

As defined in the *Visual Resources* section of the Mountain View 2030 General Plan Draft EIR, landmarks are external points of reference that are usually simply defined physical objects (e.g., a building or sign). The prominent visual features of a city are its landmarks. Some landmarks are very large and seen at great distances, and some landmarks are very small (e.g., a tree within an urban square) and can only be seen close up. Landmarks are an important element of urban form because they help people to orient themselves in the city and help identify an area. Landmarks and other gateways relevant to the Project are described in more detail below.

Scenic Views and Scenic Highways

Scenic vistas and viewsheds generally consist of expansive and high-quality views of natural features and landscapes that are visible from public locations. Views of features within and surrounding a city contribute to a feeling of community identity, visual enjoyment, and function as a resource for physical orientation. As previously noted, Mountain View takes its name from the views of the Santa Cruz Mountains to the south and west that are available throughout the City. Views of other natural features such as the Diablo Mountain Range to the southeast, Mission Peak to the east, San Francisco Bay to the north, and Stevens Creek in the eastern portion of the City are available from various locations within Mountain View. Views of the San Francisco Bay are generally only available from Shoreline Park in the North Bayshore Area.

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The State Scenic Highway Program includes a list of highways that either are eligible for designation as scenic highways or have been so designated. The State Scenic Highway Program identifies State Route (SR) 9 as the only officially designated State scenic highway in Santa Clara County. The program also identifies portions of SR 17, 35, and 152, and Interstate 280 as eligible for State scenic highway designation, but not officially designated as

such. No officially designated State scenic highways are located in or easily visible from the City of Mountain View.¹

Creek Corridors

There are two main creek corridors in Mountain View: Stevens Creek and Permanente Creek, both of which include creek-side trails. Stevens Creek extends from Shoreline Regional Park south through the City and into Sunnyvale. Permanente Creek extends south from the Shoreline Regional Park area through the rest of the City and into the City of Los Altos. The multi-use, paved Stevens Creek Trail runs from Shoreline Park, four miles south through both tidal marshlands and riparian habitat along the western side of State Route 85 as far as Yuba Drive near El Camino Real.

The Stevens Creek Trail is wooded in some areas, opens onto the City's urban landscape in other areas, offers views of the creek, groves of various types of trees, bridges, Whisman Park, wind tunnels near the NASA Ames Research Center, hangers at the Moffett Air Field, and open spaces like the Stevens Creek Tidal and Crittenden Marshes.

The Permanente Creek Trail also extends southward from Shoreline Regional Park and goes as far as the Central Expressway. The Permanente Creek trail is also paved, landscaped, and is more fragmented and is not heavily wooded like segments of the Stevens Creek Trail.²

Visual Characteristics of Precise Plan Areas

As discussed in Chapter 3, *Project Description*, to address site-specific development needs, the City has developed 25 Precise Plans covering various locations within the City. Precise Plans are a tool for coordinating future public and private improvements on specific properties where special conditions of size, shape, land ownership, or existing or desired development require particular attention. Precise Plans provide detailed specifications for land uses, relationship to surrounding areas, use intensity, circulation, design, procedures for development review, and special conditions for development occurring within each Precise Plan area. The City's Precise Plan areas are shown in Figure 3-2 in Chapter 3, *Project Description*. Precise Plans range from a small 3-acre development to large neighborhoods. The visual characteristics of the Precise Plan areas in the City with the highest development potential under the Project are described below.

East Whisman Precise Plan

The East Whisman Precise Plan area is generally bordered by US 101 and Moffett Federal Airfield/NASA Ames Research Center to the north, North Whisman Road to the west, Central Expressway to the south, and the City of Sunnyvale to the east. The area is visible from the immediate surrounding area and roadways, including North Whisman Road, Middlefield Road, SR 237, and US 101.

¹ California Department of Transportation, 2022. California State Scenic Highways. Available: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed May 3, 2022.

² City of Mountain View, 2012. *Draft 2030 General Plan and Greenhouse Gas Reduction Program Final Environmental Impact Report*. September 2012.

The East Whisman Precise Plan area is relatively flat and located within a developed, urban area of Mountain View. The area is developed with single- to multi-story office buildings, as well as similar-looking research and development, light-industrial, and commercial buildings. Buildings tend to have a large front and side setbacks occupied by surface parking and landscaped areas. The East Whisman Precise Plan area contains numerous mature trees in building parking lots, in various landscaped areas, and in the public right-of-way along streets and sidewalks. Office buildings in the East Whisman Precise Plan area exhibit a variety of styles. Older office buildings are one to two stories and made of brick, stucco, or concrete. Newer office buildings are more contemporary in style (with glass expanses, stone facades, and metal details) and are up to five stories. Older commercial and retail buildings in the Village Center neighborhood are brick and wood, one-story structures.³

North Bayshore Precise Plan

The North Bayshore Precise Plan area is located in the northernmost portion of the City. This area is bordered by Shoreline at Mountain View Regional Park and San Francisco Bay to the north, the NASA Ames Research Center to the east, US 101 to the south, and Palo Alto to the west. The site is visible from the immediate surrounding area and roadways, including North Shoreline Boulevard, San Antonio Road, Charleston Road, Amphitheater Parkway, US 101, and Shoreline at Mountain View Regional Park. The Santa Cruz Mountains are visible to the south and west of the North Bayshore Precise Plan area, and the Diablo Range is visible to the east.

The approximately 650-acre Precise Plan area is relatively flat and is located within a developed, urban area of Mountain View. The area may be visible from the higher areas of the Santa Cruz Mountains but generally the area is not visible from other locations, apart from US 101. The Precise Plan area is comprised of large-scale office, research and development, and light industrial buildings. The area is characterized by almost entirely large building footprints that reflect the industrial and office uses in the area. Buildings tend to have large front and side setbacks occupied by surface parking and landscaped areas, with floor area ratios (FARs) of less than 0.3 (i.e., low-intensity). The North Bayshore Precise Plan area contains numerous (likely thousands) of mature landscaping trees and shrubs throughout the parking lots and landscaped areas.

Office buildings in the North Bayshore Precise Plan area exhibit a variety of styles depending on when they were constructed. Many of the older buildings from the 1960s and 1970s are one or two stories and made of brick and stucco, while newer buildings from the 1980s and 1990s are characterized by more streamlined architecture. Older retail uses along Shoreline Boulevard are characterized by fairly nondescript buildings with no identifiable architectural style. More recent retail uses at Shoreline Boulevard and Pear Avenue are more distinct, with a contemporary style and stone architectural detailing.

As defined in the Mountain View 2030 General Plan, two gateways into the City are located within the North Bayshore Precise Plan area. Shoreline Boulevard serves as a gateway into

³ City of Mountain View, 2020. *East Whisman Precise Plan Integrated Final Environmental Impact Report*. January 2020.

downtown Mountain View from US 101 and also acts as a gateway into the North Bayshore area. Rengstorff Avenue also serves as a gateway into downtown and functions as a primary gateway to the North Bayshore area.

Four landmarks identified in the Mountain View 2030 General Plan are located adjacent to the North Bayshore Precise Plan area, are visible from various locations throughout the Precise Plan area, and are described below.

- **Rengstorff House.** The Rengstorff House is a significant historic building that serves as a landmark for the City. The house was one of the first to be built in Mountain View, by Henry Rengstorff. The house's striking Victorian Italianate architecture and location within Shoreline Park make it a landmark for the City. The Rengstorff House is located north of the North Bayshore Precise Plan area, and tall buildings in the Precise Plan area might be seen from the vicinity of the Rengstorff House.
- **Shoreline Amphitheatre.** This amphitheater was built in 1985 by a private developer and a joint partnership agreement with the City of Mountain View as part of the Shoreline Park project. It is distinguished by its large white tent structures.
- **Moffett Federal Airfield Hangar One.** Built during the Depression era, Hangar One at Moffett Federal Airfield remains one of the largest unsupported structures in the country. The unique shape and scale of the hangar makes it a visual landmark from US 101 and many neighborhoods in the City of Mountain View. Hangar One is located on the Moffett Federal Air Station, east of the Precise Plan area across Stevens Creek.
- **NASA Wind Tunnels.** The world's largest wind tunnel is housed in a large multi-roofed building at the NASA Ames Research Center, east of the Precise Plan area across Stevens Creek. This tunnel, which is used to test planes with wing spans of up to 100 feet, is over 1,400 feet long and 180 feet high.⁴

El Camino Real Precise Plan

The El Camino Real Precise Plan area includes nearly all parcels immediately fronting on El Camino Real (between Del Medio Avenue and Crestview Drive), as well as some additional parcels adjacent to the street. El Camino Real carries high traffic volumes and functions as a commercial corridor through the El Camino Real Precise Plan area. Land uses include low- and medium-intensity retail and commercial, with some multi-family residential buildings. Chain stores and strip malls are common, in addition to some hotels/motels. Auto repair shops and auto dealerships are also located along the corridor.

Within the El Camino Real Precise Plan area, buildings tend to be set back from the street and separated by parking lots or driveways. Buildings are between two and four stories in height. Most of the El Camino Real right-of-way is dedicated to vehicles, with six lanes of travel and two parking lanes. A significant portion of El Camino Real includes a center median that provides for landscaping and trees, as well as turning lanes. Sidewalks are located on both sides of El Camino

⁴ City of Mountain View, 2017. *North Bayshore Precise Plan Draft Subsequent Environmental Impact Report*. March 2017.

Real, with an average width of between 8 and 10 feet. Stretches of El Camino Real include a planting strip that includes street trees.⁵

Located at a prominent location at the intersection of State Route 85 and El Camino Real, the Palo Alto Medical Foundation is identified as a City landmark in the Mountain View 2030 General Plan and is clearly visible and distinctive upon the entrance to Mountain View from Sunnyvale and on State Route 85. The three-story medical center opened in 2007 and is 250,000 square feet.

San Antonio Precise Plan

The San Antonio area is located along the City of Mountain View's western edge, adjacent to the cities of Palo Alto and Los Altos, and currently includes a mix of predominantly commercial uses, with limited existing residential development. It is anchored by the San Antonio Center, a local and regional shopping destination that consists of one- and two-story buildings surrounded by large surface parking.

The San Antonio Center is identified as a City landmark in the Mountain View 2030 General Plan and is visible from various locations throughout the Precise Plan area. Large buildings, expansive parking lots, and a signage feature at the junction of San Antonio Road and El Camino Real distinguish the San Antonio Center. The signage feature is a columnar element that harkens to the establishment of the Center in the 1950s and 1960s, and is visible from a distance along both El Camino Real and San Antonio Road. While the appearance of the Center is not architecturally distinctive, its urban form and regional draw makes it an easy reference point in Mountain View.

The San Antonio Precise Plan area is comprised of 123 acres and surrounds the San Antonio Center. The area is characterized by medium to large building footprints reflecting the commercial and multi-unit residential developments characteristic of this area. Commercial buildings have the largest building footprints of the area and are generally located to the east and west of San Antonio Road. These buildings typically have side and large front setbacks. The open areas around buildings are occupied by large surface parking areas. These building footprints have different shapes, but they are typically boxy or rectangular. A few smaller commercial buildings have footprints that are closer to the street and sidewalk. These buildings have a distinct auto-orientation.⁶

Light and Glare

Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare, and if designed incorrectly, could be considered unattractive. Although nighttime light is a common feature of urban areas, spillover light can adversely affect light-sensitive uses, such as residential units at nighttime.

⁵ City of Mountain View, 2014. *El Camino Real Precise Plan Final Environmental Impact Report*. December 2014.

⁶ City of Mountain View, 2014. *San Antonio Precise Plan Final Environmental Impact Report*. December 2014.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying (*discomfort glare*) or may diminish the ability to see other objects in the darkened environment (*disability glare*). Reflective glare, such as the reflected view of the sun from a window or mirrored surface, can be distracting during the day.

Existing Light and Glare Conditions

Mountain View is a predominantly suburban city with a small number of more urbanized commercial corridors. For this reason, night lighting and glare mostly occur within and around these more densely developed areas, although residential and industrial areas produce limited amounts of nighttime lighting. Existing sources of ambient nighttime lighting generally include neon and fluorescent signs in developed areas; exterior lighting installed along buildings for safety, architectural accent, or to illuminate nighttime operations; lights within buildings that illuminate the exteriors of buildings through windows; landscape and wayfinding signage lighting; street and parking lot lighting; and vehicle headlights. The Shoreline Amphitheatre is also a prominent source of nighttime direct and ambient light. Glare is created by reflection of natural (i.e., sunlight) and artificial light off of existing windows and building surfaces.⁷

4.1.3 Regulatory Setting

Federal

There are no federal regulations pertaining to aesthetics that are applicable to the Project.

State

Title 24 Outdoor Lighting Standards

As published in Section 6 of the California Code of Regulations, Title 24 is a broad set of requirements for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility that apply to the structural, mechanical, electrical, and plumbing systems in a building. The code applies to all buildings in California. California updates its energy code every three years. Construction projects with permit applications applied for on or after January 1, 2023 must follow the 2022 Energy Code. If a permit is applied for before then, buildings follow the 2019 Building Efficiency Standards. The code includes energy efficiency standards for outdoor lighting for both the public and private sector. The standards regulate lighting characteristics such as, maximum power and brightness, shielding, and sensor controls to turn lighting on and off.

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the

⁷ City of Mountain View, 2012. *Draft 2030 General Plan and Greenhouse Gas Reduction Program Final Environmental Impact Report*. September 2012.

Streets and Highways Code, Section 260 *et seq.* The State Scenic Highway System includes a list of highways that either are eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. As discussed above in the *Environmental Setting*, no officially designated State scenic highways are located in or easily visible from the City of Mountain View.⁸

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Land Use and Design Element of the 2030 General Plan contains the following goals and policies related to visual character, visual quality, scenic views, and light and glare that are applicable to the Project.

Goal LUD-6: Distinctive neighborhoods that preserve and enhance the quality of life for residents.

Policy LUD 6.1: Neighborhood character. Ensure that new development in or near residential neighborhoods is compatible with neighborhood character.

Policy LUD 6.3: Street Presence. Encourage street facades and frontages that create a presence at the street and along interior pedestrian paseos or pathways.

Goal LUD-7: A vibrant Downtown that serves as the center for Mountain View social and civic life.

Policy LUD 7.3: Human-scaled building details. Support new and renovated Downtown buildings that include human-scaled details such as transparent windows on the ground floor that face the street, awnings and architectural features to create a comfortable and interesting pedestrian environment.

Policy LUD 7.5: Compatible uses and design. Ensure compatible uses and building design Downtown along the boundaries between residential and commercial areas.

Policy LUD 8.1: City Gateways. Emphasize city gateways that create a distinct and positive impression

Goal LUD-9: Buildings that enhance the public realm and integrate with the surrounding neighborhood.

Policy LUD 9.1: Height and setback transitions. Ensure that new development includes sensitive height and setback transitions to adjacent structures and surrounding neighborhoods.

⁸ California Department of Transportation, 2022. California State Scenic Highways. Available online: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed May 3, 2022.

Policy LUD 9.3: Enhanced public space. Ensure that development enhances public spaces through these measures:

- Encourage strong pedestrian-oriented design with visible, accessible entrances and pathways from the street.
- Encourage pedestrian-scaled design elements such as stoops, canopies and porches.
- Encourage connections to pedestrian and bicycle facilities.
- Locate buildings near the edge of the sidewalk.
- Encourage design compatibility with surrounding uses.
- Locate parking lots to the rear or side of buildings.
- Encourage building articulation and use of special materials to provide visual interest.
- Promote and regulate high-quality sign materials, colors and design that are compatible with site and building design.
- Encourage attractive water-efficient landscaping on the ground level.

Policy LUD 9.5: View preservation. Preserve significant viewsheds throughout the community.

Policy LUD 9.6: Light and glare. Minimize light and glare from new development.

Goal LUD-10: High-quality, sustainable and healthful building design and development.

Policy LUD 10.1: Sustainable design and materials. Encourage high-quality and sustainable design and materials.

Policy LUD 10.2: Low-impact development. Encourage development to minimize or avoid disturbing natural resources and ecologically significant land features.

City of Mountain Municipal Code

The City of Mountain View addresses visual considerations for development in many City documents, including the Municipal Code. The City Zoning Ordinance (Title 36) sets forth specific design guidelines, height limits, building density, building design and landscaping standards, architectural features, sign regulations, and open space and setback requirements.

The Zoning Ordinance promotes good design and careful planning of development projects to enhance the visual environment. The City's development review process includes the review of preliminary plans, the consideration of public input at the Development Review Committee, Zoning Administrator, Environmental Planning Commission and the City Council. The City's Planning Division reviews private and public development applications for conformance with City plans, ordinances, and policies related to zoning, urban design, subdivision, and CEQA. The Zoning Administrator makes recommendations to the City Council for large development projects and makes final decisions for permits and variances, and the Development Review Committee reviews the architecture and site design of new development and provides project

applicants with appropriate design comments. The development review process ensures that the architecture and urban design of new developments would protect the City's visual environment.

Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (as of October 25, 2021). The standard conditions of approval related to aesthetics include the following:

Building Design/Plan Modifications

Based on direction from the Development Review Committee (DRC), modifications shall be made to the architectural design, building materials, colors, landscaping, and/or other site or building design details prior to issuance of a building permit and shown on building permit drawings. The modifications are subject to review and approval by the Zoning Administrator to confirm compliance with the DRC's recommendation.

Exterior Materials

High-quality materials and finishes shall be used throughout the project and shall remain in compliance with the materials identified in the approved plans, except as modified by the conditions of approval herein. Details regarding all color and architectural details shall be provided in the building permit plan submittal and shall be subject to review and approval by the Zoning Administrator prior to the issuance of building permits.

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 outdoor lighting fixtures shall ensure there will 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.

4.1.4 Significance Criteria

The thresholds used to determine the significance of impacts related to aesthetics are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Approach to Analysis

The analysis of potential impacts related to aesthetics in this EIR relies on qualitatively comparing the existing built and natural environment to the future built and natural environment that may result from implementation of the Project. Whether an adverse environmental effect on aesthetics occurs is based on whether development that would be allowed by the HEU would result in the substantial interference or obstruction of a scenic view from a public vantage point or have a substantial demonstrable negative aesthetic effect. The obstruction of an individual landowners' view from private property is not considered a significant environmental impact under CEQA. As a result, the analysis generally does not consider or evaluate the Project's impact on views from private residences or other private vantage points. A significance determination for impacts related to scenic vistas (e.g., broad expansive views of natural features and landscapes) and scenic resources (e.g., gateways, landmarks, or urban creeks) is based on whether development allowed by the Project would prominently obstruct or block the majority of the expanse of scenic vista or scenic resource as seen by most viewers from public locations while taking into account the view as a whole as well as the City's land use policies. The analysis considers the sensitivity of the affected resource based on the prominence of its visibility and/or the viewpoint location, as well as the characteristics of the view. View characteristics include whether it is widely unobstructed, fleeting, intermittent, or transitory as viewed from roadways. Moreover, the significance is measured in light of the context in which the effect occurs. For example, an activity which may be significant in a rural area may not be significant in an urban area. With respect to visual character, for a project to have significant visual impacts, the project must either block views of an aesthetic resource, be located in an area that is itself considered to be an aesthetic resource, or have a substantial demonstrable negative aesthetic effect. The analysis also addresses whether the Project would conflict with applicable zoning and/or other regulations governing scenic quality or create a new source of substantial light or glare.

It should also be noted that CEQA Section 21099(d), which was added to the statute in 2019, states that "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." Thus, to the extent that this analysis identifies impacts to aesthetics resulting from infill sites within a transit priority area, its conclusions are provided for informational purposes only.

Issues Not Discussed in Impacts

As described above in Section 4.1.3, *Regulatory Setting*, there are no officially designated State scenic highways within or visible from the City of Mountain View. For this reason, the second significance criterion listed above is not addressed further in this section of the EIR.

4.1.5 Impacts of the Project

Impact AES-1: Implementation of the HEU would not have a substantial adverse effect on a scenic vista. (*Less than Significant*)

As described above in Section 4.1.2, *Environmental Setting*, scenic vistas generally consist of expansive and high-quality views of natural features and landscapes that are visible from public

locations. Views of features within and surrounding a city contribute to a feeling of community identity, visual enjoyment, and function as a resource for physical orientation. As previously noted, Mountain View takes its name from the views of the Santa Cruz Mountains to the south and west that are available throughout the City. Views of other natural features such as the Diablo Mountain Range to the southeast, Mission Peak to the east, San Francisco Bay to the north, and Stevens Creek in the eastern portion of the City are available from various locations within Mountain View. Views of the San Francisco Bay are generally only available from Shoreline Park in the North Bayshore Area.

This analysis also considers views of established City gateways and landmarks. As discussed above in the *Environmental Setting*, gateways are the entries to a city, district, or neighborhood. They act as a point of distinction between different areas and contribute to a sense of place by announcing a threshold or a passage into a place while also reinforcing the unique identity of that place. For the most part, gateways in Mountain View are associated with the City's major transportation corridors, particularly those which cross the jurisdictional boundaries of Palo Alto, Los Altos, and Sunnyvale. Important gateways within the City also include rail stations along the Central Expressway. Shoreline Boulevard also serves as a gateway into downtown Mountain View from US 101. East and west gateways to the City exist along El Camino Real and East Evelyn Avenue. As discussed above in the *Environmental Setting*, established City landmarks include the Rengstorff House, the San Antonio Center, the Palo Alto Medical Foundation, Shoreline Amphitheatre, Moffett Federal Airfield Hangar One, and NASA Wind Tunnels.

As presented in Chapter 3, *Project Description*, the Project would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Housing Element itself would contain an updated housing needs assessment; updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing; and a housing inventory that meets the City's Regional Housing Needs Allocation (RHNA) and provides a buffer of additional housing development capacity. The Project would also include amendments to other elements of the General Plan in order to maintain internal consistency between the General Plan, the zoning ordinance, and adopted Precise Plans. The Project would also include modifications to provisions in the City's General Plan Land Use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory.

As detailed in Section 3.4.1, *Housing Sites Inventory*, in Chapter 3, *Project Description*, the Project would include a number of strategies as provided for in State law and California Department of Housing and Community Development (HCD) guidance to address the requirements for a housing inventory and meet the City's 6th Cycle RHNA plus a buffer. While strategies and sites included in the Project will be refined based on community input and analysis as the EIR is being prepared, this EIR analyzes the impacts associated with the possible increase in housing production assuming use of the aforementioned strategies to plan for up to approximately 15,000 units to the year 2031, focused primarily along the commercial corridors and in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing. Of the total units it is assumed that 1,400 units would be enabled by changes

in development capacity via rezoning. The balance of approximately 13,600 units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. Future development on identified sites would continue to be at the discretion of individual property owners and will be largely dependent on market forces and, in the case of affordable housing, available funding and/or other incentives. Nonetheless, the analysis in this EIR conservatively assumes build-out of the sites inventory. In addition, the analysis in this EIR also considers approximately 2,700 units beyond 2031 that would be enabled by changes in development capacity via rezoning.

New development that could occur under the Project would generally occur along commercial corridors; in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing; and other areas that are visually appropriate for increased development intensities. New development under the Project would generally not affect areas with a high degree of scenic value. However, implementation of the Project could potentially result in the construction of housing in a scenic vista visible from one or more locations within the City or in proximity to a scenic resource, such as a City landmark.

The City's General Plan includes policies designed to ensure new development would not substantially adversely affect scenic vistas and scenic resources. Policy LUD 9.5 ensures preservation of significant viewsheds throughout the community. Policy LUD 10.2 encourages development to minimize or avoid disturbing natural resources and ecologically significant land features. Policy LUD 9.1 requires new development to include sensitive height and setback transitions to adjacent structures and surrounding neighborhoods. Policy LUD 9.3 encourages design compatibility with surrounding uses. Related policies under the City's Precise Plans support the maintenance of high quality and compatible architectural and site design, gradual well-designed transitions between different land uses, and sensitivity and access to visual view corridors. In addition, as previously described, the City's development review process, which includes the City Zoning Administrator and the Development Review Committee, would ensure that the architecture and urban design of new developments would protect the City's visual environment, including scenic vistas and scenic resources. The Zoning Administrator makes recommendations to the City Council for large development projects and makes final decisions for permits and variances, and the Development Review Committee reviews the architecture and site design of new development and improvements, and provides project applicants with appropriate design comments. Required adherence to applicable City policies, regulations, and development standards governing scenic quality would ensure that impacts to scenic vistas and scenic resources would be **less than significant**.

Mitigation: None required.

Impact AES-2: Implementation of the HEU would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality. (*Less than Significant*)

As described above in Section 4.1.2, *Environmental Setting*, the City of Mountain View is generally suburban in visual character, characterized by lower-rise buildings (mostly one to two stories in height), extensive landscaping, and a low to moderate intensity of uses. The City includes several visually distinct neighborhood areas that are separated by major roadways, highways, and transit corridors. Each of the City's geographic areas contains one or more commercial districts surrounded by residential land uses, with the exception of the North Bayshore Area and the eastern portion of the Moffett/Whisman Area, which contain predominantly office parks and light industrial/research and development uses. More dense and urban areas with taller buildings and more concentrated commercial activity are located in the Downtown area along Castro Street, as well as portions of El Camino Real.

Changes to the visual character or quality of a site affect each individual differently, and thus to some extent are based on subjective and individual perspectives. As discussed above in Impact AES-1 and detailed in Section 3.4.1, *Housing Sites Inventory*, in Chapter 3, *Project Description*, the Project would include a number of strategies as provided for in State law and HCD guidance to address the requirements for a housing inventory and meet the City's 6th Cycle RHNA plus a buffer. While strategies and sites included in the Project will be refined based on community input and analysis as the EIR is being prepared, this EIR analyzes the impacts associated with the possible increase in housing production assuming use of the aforementioned strategies to plan for up to approximately 15,000 units to the year 2031, focused primarily along the commercial corridors and in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing. Of the total units it is assumed that 1,400 units would be enabled by changes in development capacity via rezoning. The balance of approximately 13,600 units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. In addition, the analysis in this EIR also considers approximately 2,700 units beyond 2031 that would be enabled by changes in development capacity via rezoning.

The development of new housing of increased density, greater scale, and higher height than currently exists in many areas of the City would result in changes to visual conditions where the new development occurs. In general, changes to the visual environment that could result with implementation of the Project would occur in areas characterized by infill parcels, vacant lots, and other underutilized areas within or immediately adjacent to existing developed areas in the City. New development would generally occur along commercial corridors; in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing; and other areas that are visually appropriate for increased development intensities. New development under the Project would generally not affect areas with a high degree of scenic value, including, natural environments such as Stevens Creek and Permanente Creek.

The City's General Plan includes policies designed to ensure visual quality and compatible visual character:

- Policy LUD 6.1 ensures that new development in or near residential neighborhoods is compatible with neighborhood character.
- Policy LUD 9.1 requires new development to include sensitive height and setback transitions to adjacent structures and surrounding neighborhoods.
- Policy LUD 9.3 encourages design compatibility with surrounding uses.
- Policy LUD 9.5 ensures preservation of significant viewsheds throughout the community.
- Policy LUD 10.2 encourages development to minimize or avoid disturbing natural resources and ecologically significant land features.

Related policies under the City's Precise Plans support the maintenance of high quality and compatible architectural and site design, gradual well-designed transitions between different land uses, and sensitivity and access to visual view corridors.

As noted above, a relatively small portion of the housing sites inventory (1,400 units out of 15,000 total) and approximately 2,700 units beyond 2031 would not be consistent with current zoning provisions and would be rezoned, allowing changes in use, density, and/or height. The General Plan amendment and zoning ordinance proposed for adoption as part of the Project would by definition resolve any conflicts with provisions of those documents. In addition, as previously described, the City's development review process ensures that the architecture and urban design of new developments would protect the City's visual environment. Required adherence to applicable City policies, regulations, and development standards governing scenic quality would ensure that adverse impacts related to visual character or quality of public views or conflicts with applicable zoning and other regulations governing scenic quality would be **less than significant**.

Mitigation: None required.

Impact AES-3: Implementation of the HEU would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (*Less than Significant*)

As discussed above in the *Environmental Setting*, Mountain View is a predominantly suburban city with a small number of more urbanized commercial corridors. For this reason, night lighting and glare mostly occur within and around these more densely developed areas, although residential and industrial areas produce limited amounts of nighttime lighting. Existing sources of ambient nighttime lighting generally include neon and fluorescent signs in developed areas; exterior lighting installed along buildings for safety, architectural accent, or to illuminate nighttime operations; lights within buildings that illuminate the exteriors of buildings through windows; landscape and wayfinding signage lighting; street and parking lot lighting; and vehicle

headlights. The Shoreline Amphitheatre is also a prominent source of nighttime direct and ambient light.

Development of new housing anticipated under the Project would result in increased amounts of lighting associated with new development (generally installed for security and safety reasons) and reflective building surfaces. New lighting and reflective building surfaces (including windows) would be similar to those that characterize existing urban development in the City. The City's General Plan includes policies to ensure that new buildings and associated lighting would not substantially adversely affect daytime or nighttime views. Policy LUD 9.6 directs light and glare from new development to be minimized. Policies LUD 6.1, LUD 7.5, and LUD 9.1 would ensure that new development includes sensitive height and setback transitions to adjacent structures and surrounding neighborhoods and is compatible with neighborhood character. These policies would assist in reducing light and glare spillover into areas adjacent to new development. Potential glare from new developments also would be minimized with implementation of Policy LUD 10.1 encourages high-quality and sustainable design and materials that would be expected to generate little glare. In addition, as previously described, Standard Condition of Approval (Lighting Plan) and the City's development review process would ensure that the architecture and urban design of new developments would protect the City's visual environment including ensuring that new development does not generate adverse light and glare. Required adherence to applicable City policies, regulations, standard conditions of approval, and development standards would ensure that adverse impacts related light and glare would be **less than significant**.

Mitigation: None required.

4.1.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the Project in combination with other past, present, and reasonably foreseeable future development that could cause cumulatively significant impacts. Significant cumulative impacts related to aesthetics could occur if the incremental impacts of the Project combined with the impacts of cumulative development identified in Section 4.0.3, *Cumulative Impacts*, would result in a significant cumulative impact and if the Project's contribution would be "considerable."

Impact AES-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not have a substantial adverse effect on a scenic vista. (*Less than Significant*)

As presented above, Section 4.0.3, *Cumulative Impacts*, includes a discussion of cumulative development projections. Given development patterns in the region, cumulative development within the City and surrounding areas would predominately comprise infill projects in an already-developed urban environment. As with past projects, all current and future development within the City would be subject to applicable policies, development standards, discretionary permits, and development review processes, each of which has components designed to protect and enhance scenic quality. Evaluations of proposed projects according to these requirements take

into account cumulative conditions and consistency with existing surroundings. Where applicable, individual projects would adhere to conditions and/or mitigation measures, applicable design guidelines, and development standards to address potential adverse impacts related to scenic vistas.

As discussed above in Impact AES-1, the Project could result in new housing on developed and undeveloped pieces of land within the City. New development that could occur under the Project would generally occur along commercial corridors; in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing; and in other areas that are visually appropriate for increased development intensities. New development under the Project would generally not affect areas with a high degree of scenic value. The City's General Plan includes policies (as described in Impact AES-1) designed to ensure new development would not substantially adversely affect scenic vistas. In addition, as previously described, the City's development review process would ensure that the architecture and urban design of new developments would protect scenic vistas. For these reasons, the cumulative impact related to a substantial adverse effect on a scenic vista would **less than significant**.

Mitigation: None required.

Impact AES-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality. (*Less than Significant*)

As discussed above in Impact AES-1.CU, given development patterns in the region, cumulative development within the City and surrounding areas would predominately comprise infill projects in an already-developed urban environment, and thus these projects would not likely combine to create significant adverse effects to visual character and visual quality. As with past projects, all current and future projects would be subject to applicable policies, development standards, discretionary permits, and development review processes, each of which has components designed to protect and enhance visual character and the quality of public views. Evaluations of proposed projects according to these requirements take into account cumulative conditions and consistency with existing surroundings. Where applicable, individual projects would adhere to conditions and/or mitigation measures, applicable design guidelines, and development standards to address potential adverse impacts related to visual character and quality.

As discussed above in Impact AES-2, the development of new housing of increased density, greater scale, and higher height under the Project than currently exists in many areas of the City would result in changes to visual conditions where the new development occurs. In general, changes to the visual environment that could result with implementation of the Project would occur in areas characterized by infill parcels, vacant lots, and other underutilized areas within or immediately adjacent to existing developed areas in the City. New development would generally occur along commercial corridors; in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing; and other areas that are visually appropriate for

increased development intensities. In addition, The City's General Plan includes policies (as described in Impact AES-2) designed to ensure visual quality and compatible visual character in areas where new housing is developed. Finally, as previously described, the City's development review process would ensure that the architecture and urban design of new developments would protect the City's visual environment. For these reasons, the cumulative impact related to a substantial degradation of visual character or quality of public views or conflicts with applicable zoning and other regulations governing scenic quality would be **less than significant**.

Mitigation: None required.

Impact AES-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (*Less than Significant*)

Cumulative development within the City and surrounding areas would predominately comprise infill projects in an already-developed urban environment that includes substantial amounts of existing nighttime ambient light. As with past projects, all current and future projects would be subject to applicable policies, development standards, discretionary permits, and development review processes, each of which has components designed minimize adverse light and glare. Evaluations of proposed projects according to these requirements take into account cumulative conditions and consistency with existing surroundings. Where applicable, individual projects would adhere to conditions and/or mitigation measures, applicable design guidelines, and development standards to address potential adverse impacts related to light and glare.

As discussed above in Impact AES-3, development of new housing anticipated under the Project would result in increased amounts of lighting associated with new development (generally installed for security and safety reasons) and reflective building surfaces. New lighting and reflective building surfaces (including windows) would be similar to those that characterize existing urban development in the City. The City's General Plan includes policies (as described in Impact AES-3) to ensure that new buildings and associated lighting would not substantially adversely affect daytime or nighttime views. In addition, as previously described, the City's development review process would ensure that the architecture and urban design of new developments would ensure that new development does not generate adverse light and glare. For these reasons, the cumulative impact related to related light and glare would be **less than significant**.

Mitigation: None required.

4.1.7 Summary of Aesthetics Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact AES-1: Implementation of the HEU would not have a substantial adverse effect on a scenic vista.	Less than Significant	None required	-
Impact AES-2: Implementation of the HEU would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality.	Less than Significant	None required	-
Impact AES-3: Implementation of the HEU would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant	None required	-
Impact AES-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not have a substantial adverse effect on a scenic vista.	Less than Significant	None required	-
Impact AES-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not substantially degrade the existing visual character or quality of public views of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality.	Less than Significant	None required	-
Impact AES-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development, would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant	None required	-

4.1.8 References

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City of Mountain View, 2014. *San Antonio Precise Plan Final Environmental Impact Report*. December 2014.

City of Mountain View, 2017. *North Bayshore Precise Plan Draft Subsequent Environmental Impact Report*. March 2017.

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City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021.

4.2 Air Quality

4.2.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on air quality. This section first includes a description of the existing environmental setting as it relates to air quality and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on air quality.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to air quality were received during the NOP comment period.

4.2.2 Environmental Setting

Climate and Meteorology

The City of Mountain View is located in the San Francisco Bay Area Air Basin (SFBAAB), in the Santa Clara Valley. Air quality is influenced by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.

The Santa Clara Valley is bounded by the Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter, and mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly winds in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly. Pollution sources are plentiful and complex in this subregion. The Santa Clara Valley has a high concentration of industry at the northern end, in the Silicon Valley. Some of these industries are sources of air toxics as well as criteria air pollutants. In addition, Santa Clara Valley's large population and

many work-site destinations generate the highest mobile source emissions of any subregion in the SFBAAB (BAAQMD 2017a).

Criteria Air Pollutants

As required by the 1970 Federal Clean Air Act, the United States Environmental Protection Agency (U. S. EPA) initially identified six air pollutants that are pervasive in urban environments for which state and federal health-based ambient air quality standards were established. The U.S. EPA calls these pollutants “criteria air pollutants,” and the agency has regulated them by developing specific public health-based and welfare-based criteria as the basis for setting permissible levels. Ozone, CO, particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead are the six criteria air pollutants originally identified by the U.S. EPA. Later, subsets of PM were identified and permissible levels were established. These include PM₁₀, with a diameter of 10 microns, and PM_{2.5}, with a diameter of 2.5 microns or less (PM_{2.5}).

Table 4.2-1 briefly summarizes the sources and the most common health and environmental effects for each of the air pollutants for which there is a national and/or California ambient air quality standard (ambient air quality standards are discussed below and further under the Regulatory Setting).

Air Quality Standards

As discussed above, National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria air pollutants have been set at levels considered safe to protect public health and welfare and protect the environment. **Table 4.2-2** summarizes the current NAAQS and CAAQS for each of the criteria air pollutants. Although the federal Clean Air Act established standards, individual states retained the option to adopt more stringent standards and to include other pollution sources. California had already established its own air quality standards when federal standards were established, and as shown in Table 4.2-2, there are differences between the state and national ambient air quality standards. California ambient standards tend to be at least as protective as national ambient standards or are often more stringent. In addition to the six criteria air pollutants, California has adopted ambient air quality standards for sulfates, hydrogen sulfide, visibility reducing particles, and vinyl chloride.

Toxic Air Contaminants

In addition to criteria air pollutants, individual projects may emit TACs. TACs collectively refer to a diverse group of air pollutants that may cause chronic (i.e., of long duration) and acute (i.e., severe but short-term) adverse effects on human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Thus, individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

**TABLE 4.2-1
SOURCES, ENVIRONMENTAL AND HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS**

Criteria Air Pollutant	Sources	Environmental & Health Effects
Ozone	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.	<ul style="list-style-type: none"> • Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue • Crop, forest and ecosystem damage • Damage to a variety of materials, including rubber, plastics, fabrics, paint and metals
Carbon Monoxide	Internal combustion engines, primarily gasoline-powered motor vehicles.	<ul style="list-style-type: none"> • Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Nitrogen Dioxide	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.	<ul style="list-style-type: none"> • Lung irritation • Enhanced allergic responses
Sulfur Dioxide	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.	<ul style="list-style-type: none"> • Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Particulate Matter (PM ₁₀)	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).	<ul style="list-style-type: none"> • Premature death & hospitalization, primarily for worsening of respiratory disease • Reduced visibility and material soiling
Particulate Matter (PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.	<ul style="list-style-type: none"> • Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits • Increased symptoms, increased inhaler usage
Lead	Present sources: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.	<ul style="list-style-type: none"> • Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage
Sulfates	Produced by the reaction in the air of SO ₂ .	<ul style="list-style-type: none"> • Same as PM_{2.5}, particularly worsening of asthma and other lung diseases • Reduces visibility
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining	<ul style="list-style-type: none"> • Nuisance odor (rotten egg smell) • At high concentrations: headache & breathing difficulties
Visibility Reducing Particles	See PM _{2.5}	<ul style="list-style-type: none"> • Reduced airport safety, scenic enjoyment, road safety, and discourages tourism
Vinyl Chloride	Polyvinyl chloride and vinyl manufacturing.	<ul style="list-style-type: none"> • Central nervous system effects, such as dizziness, drowsiness & headaches • Long-term exposure: liver damage & liver cancer

SOURCE: CARB, 2022b; CARB, 2022c

**TABLE 4.2-2
 STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	State Standards (CAAQS) ^a	Federal Standards (NAAQS) ^b
Ozone	1 hour	0.09 ppm	NA
	8 hours	0.070 ppm	0.070 ppm ^c
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hours	9.0 ppm	9 ppm
Nitrogen Dioxide (NO ₂)	1 hour	0.18 ppm	0.100 ppm
	Annual	0.03 ppm	0.053 ppm
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm	0.075 ppm
	24 hours	0.04 ppm	0.14 ppm
	Annual	NA	0.03 ppm
Particulate Matter (PM ₁₀)	24 hours	50 µg/m ³	150 µg/m ³
	Annual ^d	20 µg/m ³	NA
Fine Particulate Matter (PM _{2.5})	24 hours	NA	35 µg/m ³
	Annual	12 µg/m ³	12 µg/m ³
Lead	30 days	1.5 µg/m ³	NA
	Calendar quarter	NA	1.5 µg/m ³
	Rolling 3-month average	NA	0.15 µg/m ³
Sulfates	24 hours	25 µg/m ³	NA
Hydrogen Sulfide	1 hour	0.03 ppm	NA
Visibility reducing particles	8 hours	-- ^e	NA
Vinyl Chloride	24 hours	0.01 ppm (26 µg/m ³)	NA

NOTES:

A = Attainment; N = Nonattainment; U = Unclassified; NA = Not Applicable, no applicable standard; ppm = parts per million; µg/m³ = micrograms per cubic meter

^a CAAQS = California ambient air quality standards. CAAQS for ozone, CO (except Lake Tahoe), SO₂ (one-hour and 24-hour), NO₂, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All other State standards shown are values not to be equaled or exceeded.

^b NAAQS = national ambient air quality standards. NAAQS, other than ozone and particulates, and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The eight-hour ozone standard is attained when the three-year average of the fourth highest daily concentration is 0.08 ppm or less. The 24-hour PM₁₀ standard is attained when the three-year average of the 99th percentile of monitored concentrations is less than the standard. The 24-hour PM_{2.5} standard is attained when the three-year average of the 98th percentile is less than the standard.

^c On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.

^d State standard = annual geometric mean; national standard = annual arithmetic mean.

^e Statewide visibility-reducing particle standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

SOURCE: BAAQMD, 2017b.

Unlike criteria air pollutants, TACs are not subject to ambient air quality standards but are regulated by air districts using a risk-based approach to determine which sources and which pollutants to control as well as the degree of control. A *health risk assessment* (HRA) is an

analysis that estimates human health exposure to toxic substances, and when considered together with information regarding the toxic potency of the substances, an HRA provides quantitative estimates of health risks.¹

The Office of Environmental Hazard Health Assessment (OEHHA, 2015) and the BAAQMD (BAAQMD, 2016) provide guidelines for conducting HRAs. Exposure assessment guidance published by the BAAQMD in January 2016 adopts the assumption that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 30 years (BAAQMD, 2016a). Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposure to fine PM (PM_{2.5}) is strongly associated with mortality, respiratory diseases, and poor lung development in children, and other health effects, such as hospitalization for cardiopulmonary disease (San Francisco Department of Public Health, 2008). Diesel particulate matter (DPM), a byproduct of diesel fuel combustion, is also of concern. CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans (CARB, 1998). The estimated cancer risk from exposure to DPM is much higher than the risk associated with any other TAC routinely measured in the region. DPM is discussed further, below.

In addition to monitoring criteria air pollutants, the Bay Area's air toxics network includes 16 monitoring sites, five of which were established by the CARB and are maintained by the BAAQMD. The remaining 11 sites are operated by the BAAQMD. These stations measure concentrations of volatile organic compounds (VOC), polycyclic aromatic hydrocarbons, and metals categorized as TACs. The TACs selected for monitoring are those that traditionally have been found in the highest concentrations in ambient air and therefore tend to produce the most significant risk. However, there are no monitoring stations in the immediate vicinity of the HEU area that measure ambient concentrations of carcinogenic TACs.

Roadway-Related Pollutants

Motor vehicles are responsible for a large share of air pollution, especially in California. Vehicle tailpipe emissions contain diverse forms of particles and gases, and vehicles also contribute to particulates by generating road dust and tire wear. Epidemiologic studies have demonstrated that people living close to freeways or busy roadways have poorer health outcomes, including increased asthma symptoms and respiratory infections, and decreased pulmonary function and poor lung development in children. Air pollution monitoring conducted in conjunction with epidemiologic studies has confirmed that roadway-related health effects vary with modeled exposure to PM and NO₂. In traffic-related studies, the additional cancer health risk attributable to roadway proximity was seen within 1,000 feet of the roadway and was strongest within 300 feet (CARB, 2005). As a result, CARB recommends that new sensitive land uses not be located within 500 feet of a freeway or urban roads carrying more than 100,000 vehicles per day. CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that

¹ In general, an HRA is required if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a HRA for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary, CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB, 2005). Sometimes, suggesting project design changes or mitigation measures in the project review phase can also reduce or avoid potential impacts. This underscores the importance of addressing potential incompatible land uses as early as possible in the project review process, ideally in the general plan itself.

Diesel Particulate Matter

CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways. CARB estimated average bay area cancer risk from exposure to diesel particulate, based on a population-weighted average ambient diesel particulate concentration, at about 480 in one million as of the year 2000, which is much higher than the risk associated with any other toxic air pollutant routinely measured in the region.

In 2000, CARB approved a comprehensive *Diesel Risk Reduction Plan* to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. Subsequent CARB regulations apply to new trucks and diesel fuel. With new controls and fuel requirements, 60 trucks built in 2007 would have the same particulate exhaust emissions as one truck built in 1988 (Pollution Engineering, 2006). The regulation was anticipated to result in an 80 percent decrease in statewide diesel health risk in 2020 as compared with the diesel risk in 2000. Many of the measures of the *Diesel Risk Reduction Plan* have been approved and adopted, including the federal on-road and off-road² diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California. Subsequent regulations regarding on-road diesel truck retrofits with particulate matter controls, 2010 or later engine standards, and fleet average emission rate standards to increase vehicle turnover have resulted in much lower DPM and PM_{2.5} emissions over time. It is estimated that these regulations reduced diesel particulate emissions 78 percent from 1990 levels (Cal Matters, 2021). Despite notable emission reductions, CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. The ability to detect odors varies considerably among the population and is subjective. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Odor impacts should be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Odor sources typically include wastewater treatment plants, landfills,

² Non-road is the term EPA uses for vehicles and equipment that are not on-road, where in California this term is off-road.

confined animal facilities, composing stations, food manufacturing plants, refineries, and chemical plants (BAAQMD, 2017a).

Ambient Air Quality

The BAAQMD has jurisdiction to regulate air quality within the nine-county SFBAAB. Accordingly, the region’s air quality monitoring network provides information on ambient concentrations of criteria air pollutants at various locations in the SFBAAB. **Table 4.2-3** presents a five-year summary for 2016 to 2020 of the highest annual criteria air pollutant concentrations, recorded at the air quality monitoring station closest to the HEU area, operated and maintained by the BAAQMD at 897 Barron Avenue in Redwood City, approximately 9 miles northwest of the HEU area. The data collected at this monitoring station are representative of the ambient air quality in Mountain View. It also compares these concentrations with the most stringent applicable ambient air quality standards (whether state or federal). Concentrations shown in bold indicate an exceedance of that standard. CO is not included in this table as CO concentrations have been well below the standards throughout the Bay Area since the SFBAAB was designated as attainment with respect to the CO standards in 1998. Lead and SO₂ are not included in this table because ambient lead concentrations are only monitored on an as-warranted basis, and the SFBAAB has never been designated as non-attainment for SO₂. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. The only lead monitoring station in the Bay Area is located at Reid-Hillview Airport in San Jose (BAAQMD, 2021a). General aviation airports can be sources of lead because piston engine aircraft continue to use leaded fuel.

**TABLE 4.2-3
SUMMARY OF AMBIENT AIR QUALITY DATA IN THE PROJECT AREA**

Pollutant	Standard	Monitoring Data by Year ^a				
		2016	2017	2018	2019	2020
Ozone						
Maximum 1-Hour Concentration (ppm)	>0.090 ppm ^b	0.075	0.115	0.067	0.083	0.098
Days 1-Hour Standard Exceeded		0	2	0	0	1
Maximum 8-Hour Concentration (ppm)	0.070 ppm ^c	0.061	0.087	0.050	0.077	0.078
Days 8-Hour Standard Exceeded		0	2	0	2	1
Fine Particulate Matter (PM_{2.5})						
Maximum 24-Hour Concentration (µg/m ³)	>35 µg/m ³ ^c	19.5	60.8	120.9	29.5	124.1
Annual Average (µg/m ³)	>12 µg/m ³ ^{b,c}	-	9.1	10.6	7.0	9.8
Days 24-Hour Standard Exceeded		0	6	13	0	9
Nitrogen Dioxide (NO₂)						
Maximum 1-Hour Concentration (ppm)	>0.100 ppm ^c	45.7	67.4	77.3	54.9	45.9
Days 1-Hour Standard Exceeded		0	0	0	0	0

NOTES: ppm = parts per million; µg/m³ = micrograms per cubic meter

^a “—” indicates that data are not available.

^b State standard, not to be exceeded; also a federal standard, not to be exceeded more than one per year.

^c Federal standard, not to be exceeded.

SOURCE: CARB, 2022d

Compliance with the standards is on a regional basis. In the air basin, compliance is demonstrated by ongoing measurements of pollutant concentrations at more than 30 air quality monitoring stations operated by the BAAQMD in all nine bay area counties. An exceedance of an ambient air quality standard at any one of the stations counts as a regional exceedance.

As shown in Table 4.2-3, the most stringent applicable standards for ozone (the state one-hour standard of 0.09 ppm and the federal eight-hour standard of 0.07 ppm) were exceeded between 2017 and 2020. Table 4.2-3 also shows that the state 24-hour PM₁₀ standard of 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) was exceeded on 28 days between 2017 and 2020. The state annual average standard was not exceeded between 2016 and 2020. This station does not monitor PM₁₀, but ambient levels of NO₂ were well below the standards.

Air Quality Index

The U.S. EPA developed the Air Quality Index (AQI) scale to make the public health impacts of air pollution concentrations easily understandable. The index, much like an air quality “thermometer,” translates daily air pollution concentrations into a number on a scale between 0 and 500. The numbers in the scale are divided into six color-coded ranges, with numbers 0 through 500 as outlined below:

- **Green (0–50)** indicates “good” air quality. No health impacts are expected when air quality is in the green range.
- **Yellow (51–100)** indicates air quality is “moderate.” Unusually sensitive people should consider limiting prolonged outdoor exertion.
- **Orange (101–150)** indicates air quality is “unhealthy for sensitive groups.” Active children and adults, and people with respiratory disease, such as asthma, should limit outdoor exertion.
- **Red (151–200)** indicates air quality is “unhealthy.” Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
- **Purple (201–300)** indicates air quality is “very unhealthy.” Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit outdoor exertion.
- **Maroon (301–500)** indicates air quality is “hazardous.” This would trigger health warnings of emergency conditions, and the entire population is more likely to be affected.

The AQI numbers refer to specific amounts of pollution in the air. They are based on the federal air quality standards for ozone, CO, NO₂, SO₂, PM₁₀, and PM_{2.5}. In most cases, the federal standard for these air pollutants corresponds to the number 100 on the index chart. Thus, if the concentration of any of these pollutants rises above its respective standard, the air quality can be unhealthy for the public. In determining the air quality forecast, local air districts use the anticipated concentration measurements for each of the major pollutants, convert them into index numbers, and determine the highest index for each zone in a district. A Spare the Air Alert is called for the Bay Area when air quality is expected to be unhealthy in any of the region’s five reporting zones.

Readings below 100 on the AQI scale would not typically affect the health of the general public (although readings in the moderate range of 50 to 100 may affect unusually sensitive people). Levels above 300 rarely occur in the United States, and readings above 200 have not occurred in the Bay Area in decades, with the exception of the October 2017 and November 2018 wildfires north of San Francisco and the August/September 2020 complex wildfires that occurred throughout the Bay Area. As a result, the AQI in several neighboring counties reached the “very unhealthy” and “hazardous” designations, ranging from values of 201 to above 350. During those periods, the BAAQMD issued “Spare the Air” alerts and recommended that individuals stay inside with windows closed and refrain from significant outdoor activity. Wildfires appear to be occurring with increasing frequency in California and the Bay Area as a result of global warming and climate change. Eighteen of the state’s 20 largest wildfires and most destructive fires on record have occurred since the year 2000 (CALFIRE, 2022).

AQI statistics over recent years indicate that air quality in the South Central Bay which includes Mountain View is predominantly in the “Good” or “Moderate” categories and healthy on most days for most people. Historical BAAQMD data indicate that the SFBAAB experienced air quality in the red level (unhealthy) on 34 days between 2017 and 2021. As shown in **Table 4.2-4**, the air basin had a total of 110 red-level or orange-level (unhealthy or unhealthy for sensitive groups) days between 2017 and 2021. A number of these days are attributable to the increasing frequency of wildfires. This table also shows that the SFBAAB experienced a total of 9 purple level (very unhealthy) days in between 2017 and 2021.

**TABLE 4.2-4
 AIR QUALITY INDEX STATISTICS FOR THE SFBAAB**

AQI Statistics	Number of Days per Year				
	2017	2018	2019	2020	2021
Unhealthy for Sensitive Groups (Orange) AQI: 151-200	9	8	10	34	3
Unhealthy (Red) AQI: 201-300	9	8	0	17	0
Very Unhealthy (Purple) AQI: 301-500	3	5	0	1	0

SOURCE: BAAQMD, 2022

Existing Sources of Air Pollution in the Project Area

The BAAQMD’s inventory of permitted stationary sources of emissions shows numerous permitted stationary emission facilities present within the HEU area boundaries. The vast majority of these sources are stationary diesel engines for power generators and fuel stations. The major freeways and roadways in the vicinity of the HEU areas are U.S. 101 and State Routes (SR) 82 (El Camino Real), 85 and 287. In addition, the Caltrain line runs through the center of Mountain View.

Sensitive Receptors

Air quality does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. More sensitive population groups include: the

elderly and the young; those with higher rates of respiratory disease, such as asthma and chronic obstructive pulmonary disease; and those with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases. The BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, daycare centers, hospitals, and senior-care facilities. Workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration to ensure the health and well-being of their employees (BAAQMD, 2011).

The proximity of sensitive receptors to motor vehicles is an air pollution concern, especially in urban areas where building setbacks are limited and roadway volumes are higher than suburban locations of the bay area. Vehicles also contribute to particulates by generating road dust and through tire wear. Existing sensitive receptors are present throughout the HEU areas.

4.2.3 Regulatory Setting

Regulation of air pollution is achieved through both national and state ambient air quality standards and through emissions limits on individual sources of air pollutants. Local Air Quality Management Districts and Air Pollution Control Districts are responsible for demonstrating attainment with state air quality standards through the adoption and enforcement of Attainment Plans.

Federal

Criteria Air Pollutants

The 1970 Clean Air Act (most recently amended in 1990) requires that regional planning and air pollution control agencies prepare a regional air quality plan to outline the measures by which both stationary and mobile sources of pollutants will be controlled in order to achieve all ambient air quality standards by the deadlines specified in the act. These ambient air quality standards are intended to protect the public health and welfare, and they specify the concentration of pollutants (with an adequate margin of safety) to which the public can be exposed without adverse health effects. They are designed to protect those segments of the public most susceptible to respiratory distress, including asthmatics, the very young, the elderly, people weakened from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels that are somewhat above ambient air quality standards before adverse health effects are observed. **Table 4.2-5** presents current state (California Ambient Air Quality Standards, or CAAQS) and national (National Ambient Air Quality Standards, or NAAQS) ambient air quality standards.

NAAQS and CAAQS have been set at levels considered safe to protect public, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. As explained by CARB, “An air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without any harmful effects on people or the environment” (CARB, 2017). That is, if a region is in compliance with the ambient air quality standards, its regional air quality can be considered protective of public health. The NAAQS are statutorily required to be set by the U.S. EPA at levels that are

“requisite to protect the public health.”³ Therefore, the closer a region is to attaining a particular ambient air quality standard, the lower the human health impact is from that pollutant. See Section 4.2.2, above, for a brief description of the health effects of exposure to criteria air pollutants.

**TABLE 4.2-5
STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND MAJOR SOURCES**

Pollutant	Averaging Time	CAAQS	NAAQS	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hour	9.0 ppm	9 ppm	
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm	
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hour	---	0.5 ppm ¹	
	24 hour	0.04 ppm	0.14 ppm	
	Annual Avg.	---	0.030 ppm	
Respirable Particulate Matter (PM ₁₀)	24 hour	50 ug/m ³	150 ug/m ³	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 ug/m ³	---	
Fine Particulate Matter (PM _{2.5})	24 hour	---	35 ug/m ³	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Avg.	12 ug/m ³	12.0 ug/m ³	
Lead	Monthly Ave.	1.5 ug/m ³	---	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m ³	
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Geothermal power plants, petroleum production and refining
Sulfates	24 hour	25 ug/m ³	No National Standard	Produced by the reaction in the air of SO ₂ .
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	See PM _{2.5} .
Vinyl chloride	24 hour	0.01 ppm	No National Standard	Polyvinyl chloride and vinyl manufacturing.

NOTE:
ppb = parts per billion; ppm = parts per million; ug/m³ = micrograms per cubic meter.

^a Secondary national standard.

SOURCES: CARB, 2016.

³ See <https://www.law.cornell.edu/uscode/text/42/7409>.

Pursuant to the 1990 Federal Clean Air Act Amendments (FCAAA), the US EPA classifies air basins (or portions thereof) as “attainment”, “nonattainment”, or “unclassified” for each criteria air pollutant, based on whether or not the national standards had been achieved. As shown in **Table 4.2-5**, at the federal level, the SFBAAB is designated as a nonattainment area for the 8-hour ozone standard and the federal 24-hour PM_{2.5} standard. The SFBAAB is in attainment for all other federal ambient air quality standards. State-level attainment status of the SFBAAB is discussed further below.

The FCAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The FCAA added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has the responsibility to review all SIPs to determine if they conform to the mandates of the FCAA and will achieve air quality goals when implemented.

Federal and State Attainment Designations for Criteria Air Pollutants

Pursuant to the 1990 Federal Clean Air Act Amendments, the U.S. EPA classifies air basins (or portions thereof) as “attainment”, “nonattainment”, or “unclassified” for each criteria air pollutant, based on whether or not the national standards had been achieved. As shown in **Table 4.2-6**, at the federal level, the SFBAAB is designated as a nonattainment area for the 8-hour ozone standard and the federal 24-hour PM_{2.5} standard. The SFBAAB is in attainment for all other federal ambient air quality standards.

The California Clean Air Act (California Health and Safety Code section 39600 et seq.) passed in 1988, like its federal counterpart, calls for designation of areas as “attainment”, “nonattainment”, or “unclassified” with respect to the state standards. The SFBAAB is currently designated as nonattainment for the state 8-hour and 1-hour ozone standards, the state average and 24-hour PM₁₀ standards, and the state average PM_{2.5} standards. The SFBAAB is designated as attainment or unclassified with respect to the other state standards.

The FCAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The FCAA added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has the responsibility to review all SIPs to determine if they conform to the mandates of the FCAA and will achieve air quality goals when implemented.

**TABLE 4.2-6
SAN FRANCISCO BAY AREA AIR BASIN ATTAINMENT STATUS**

Pollutant	Averaging Time	Designation/Classification	
		State Standards	Federal Standards
Ozone	8 Hour	Nonattainment	Nonattainment
	1 Hour	Nonattainment	--
Carbon Monoxide	8 Hour	Attainment	Attainment
	1 Hour	Attainment	Attainment
Nitrogen Dioxide	1 Hour	Attainment	--
	Annual Arithmetic Mean	--	Attainment
Sulfur Dioxide	24 Hour	Attainment	--
	1 Hour	Attainment	--
	Annual Arithmetic Mean	--	--
Respirable Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	Nonattainment	--
	24 Hour	Nonattainment	Unclassified
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	Nonattainment	Unclassified/Attainment
	24 Hour	--	Nonattainment
Sulfates	24 Hour	Attainment	--
	30 Day Average	--	Attainment
Lead	Calendar Quarter	--	Attainment
	Rolling Month Average	--	--
	1 Hour	Unclassified	--
Vinyl Chloride	24 Hour	No information available	--
Visibility Reducing Particles	8 Hour	Unclassified	--

NOTES:

µg/m³ = micrograms per cubic meter; Avg. = Average; PM_{2.5} = particulate matter 2.5 microns or less in diameter; PM₁₀ = particulate matter 10 microns or less in diameter; ppb = parts per billion; ppm = parts per million

SOURCE: Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, updated January 5, 2017. Available at <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed April 25, 2022.

State

Criteria Air Pollutants

Although the federal Clean Air Act established the NAAQS, individual states retained the option to adopt more stringent standards and to include other pollution sources. California had already established its own air quality standards when federal standards were established, and because of the unique meteorological challenges in California, there are differences between the state and national ambient air quality standards, as shown in **Table 4.2-5**. California ambient standards tend to be at least as protective as national ambient standards or are often more stringent.

In 1988, California passed the California Clean Air Act (California Health and Safety Code section 39600 et seq.), which, like its federal counterpart, called for designation of areas as “attainment”, “nonattainment”, or “unclassified” with respect to the state standards. The

SFBAAB is currently designated as nonattainment for the state 8-hour and 1-hour ozone standards, the state average and 24-hour PM₁₀ standards, and the state average PM_{2.5} standards. The SFBAAB is designated as attainment or unclassified with respect to the other state standards.

Toxic Air Contaminants

The Health and Safety Code defines TACs as air pollutants that may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under AB 1807 (Tanner). A total of 243 substances have been designated TACs under California law, including the 189 (federal) Hazardous Air Pollutants.

The CARB In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). This includes vehicles that are rented or leased (rental or leased fleets). CARB's goal is to gradually reduce the state-wide construction vehicle fleet's emissions through turnover, repower, or retrofits. New engine emissions requirements were grouped into tiers based on the year in which the engine was built (CARB 2022a). In 2014, new engines were required to meet Tier 4 Final standards, which to date are the most stringent emissions standards for off-road vehicle engines. The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation is to reduce particulate matter (PM₁₀ and PM_{2.5}) and NO_x emissions from off-road heavy-duty diesel vehicles in California (CARB 2022e). This regulation also limits idling to 5 minutes, requires a written idling policy for larger vehicle fleets, and requires that fleet operators provide information on their engines to CARB and label vehicles with a CARB-issued vehicle identification number.

CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses. As discussed above, CARB published Air Quality and Land Use Handbook: A Community Health Perspective in April 2005. This handbook is intended to give guidance to local governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities such as ports, rail yards, and distribution centers. Sensitive receptor siting recommendations for applicable uses in the City of Mountain View are listed in **Table 4.2-7** below. CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB, 2005).

**TABLE 4.2-7
RECOMMENDATIONS FOR SITING NEW SENSITIVE LAND USES**

Source Category	Advisory Recommendations of Locations to Avoid
Freeways and High-Traffic Roads	500' of a freeway or urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Dry Cleaners Using Perchloroethylene	300' of any dry cleaning operation. For operations with two or more machines, provide 500'. For operations with three or more machines, consult the local air district. Also, do not site new sensitive receptors in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	300' of a large gas station, defined as a facility with a throughput of 3.6 million gallons per year or greater. A 50' separation is recommended for typical gas dispensing facilities.

SOURCE: CARB, 2005.

Off-road Diesel Emissions

The CARB In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). This includes vehicles that are rented or leased (rental or leased fleets). CARB’s goal is to gradually reduce the state-wide construction vehicle fleet’s emissions through turnover, repower, or retrofits. New engine emissions requirements were grouped into tiers based on the year in which the engine was built (CARB 2022a). In 2014, new engines were required to meet Tier 4 Final standards, which to date are the most stringent emissions standards for off-road vehicle engines. The goal of the In-Use Off-Road Diesel-Fueled Fleets Regulation is to reduce particulate matter (PM₁₀ and PM_{2.5}) and NO_x emissions from off-road heavy-duty diesel vehicles in California (CARB 2022b). This regulation also limits idling to 5 minutes, requires a written idling policy for larger vehicle fleets, and requires that fleet operators provide information on their engines to CARB and label vehicles with a CARB-issued vehicle identification number.

CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses. As discussed above, CARB published Air Quality and Land Use Handbook: A Community Health Perspective in April 2005. This handbook is intended to give guidance to local governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities such as ports, rail yards, and distribution centers. Sensitive receptor siting recommendations for applicable uses in the HEU area are listed in **Table 4.2-8** below. CARB notes that these recommendations are advisory and should not be interpreted as defined “buffer zones,” and that local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary CARB’s position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB, 2005).

**TABLE 4.2-8
 RECOMMENDATIONS FOR SITING NEW SENSITIVE LAND USES**

Source Category	Advisory Recommendations of Locations to Avoid
Freeways and High-Traffic Roads	500' of a freeway or urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Dry Cleaners Using Perchloroethylene	300' of any dry cleaning operation. For operations with two or more machines, provide 500'. For operations with three or more machines, consult the local air district. Also, do not site new sensitive receptors in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	300' of a large gas station, defined as a facility with a throughput of 3.6 million gallons per year or greater. A 50' separation is recommended for typical gas dispensing facilities.

SOURCE: CARB, 2005.

California Building and Energy Efficiency Standards (Title 24)

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce emissions of criteria pollutants or TACs, increased energy efficiency and reduced consumption of natural gas and other fuels would also result in lower criteria pollutant and TAC emissions from residential and non-residential buildings subject to these standards. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods (CEC, 2018).

The most recent update to the Title 24 energy efficiency standards (2019 standards) went into effect on January 1, 2020. On August 11, 2021, the CEC adopted the next update, the 2022 Energy Code which was approved by the California Building Standards Commission for inclusion into the California Building Standards Code (CEC, 2022). The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic (PV) and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. The 2022 Update includes measures that will reduce energy use in single family, multifamily, and nonresidential buildings. These measures will:

1. Affect newly constructed buildings by adding new prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California;
2. Require PV and battery storage systems for newly constructed multifamily and selected nonresidential buildings;
3. Update efficiency measures for lighting, building envelope, heating, ventilation, and air conditioning (HVAC); and
4. Make improvements to reduce the energy loads of certain equipment covered by (i.e., subject to the requirements of) the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

As future updates to the Title 24 standards are rolled out, development within the HEU area would be required to adhere to the current version of Title 24 at that time, as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits.

California Green Standards Building Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. Like the Title 24 Part 6 standards, compliance with the CALGreen Code also reduces criteria pollutant and TAC emissions. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020 (California Building Standards Commission [CBSC], 2019). The 2019 standards prescribe Electric Vehicle (EV) charging requirements for residential and non-residential buildings.

The next, 2022 CALGreen update simplifies the code and its application in several ways. It offers new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. While the 2019 CALGreen Code only requires provision of EV Capable spaces with no requirement for chargers to be installed at multifamily dwellings, the 2022 CALGreen code mandates chargers (California Housing and Community Development, n.d).

Regional BAAQMD

The BAAQMD is the regional agency with jurisdiction over the nine-county region located in the SFBAAB. The Association of Bay Area Governments (ABAG), the Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various non-governmental organizations also participate in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs. The BAAQMD is responsible for attaining and/or maintaining air quality in the region within federal and state air quality standards. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the region and to develop and implement strategies to attain the applicable federal and state standards. The BAAQMD has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits, and can impose emission limits, set fuel or material specifications, or establish operational limits to reduce air

emissions. The BAAQMD also regulates new or expanding stationary sources of TACs and requires air toxic control measures for many sources emitting TACs.

Clean Air Plan

The most recent clean air plan was updated in 2017. The *2017 Clean Air Plan: Spare the Air, Cool the Climate* (2017 Clean Air Plan; BAAQMD 2017c) was adopted on April 19, 2017 by the BAAQMD in cooperation with the MTC, the San Francisco Bay Conservation and Development Commission, and the ABAG to provide a regional strategy focusing on two closely-related goals: protecting public health and protecting the climate.

To fulfill state ozone planning requirements, the 2017 Clean Air Plan includes all feasible measures to reduce emissions of ozone precursors ROG and NO_x, and reduce transport of ozone and its precursors to neighboring air basins. In addition, the plan builds upon and enhances the BAAQMD's efforts to reduce emissions of PM₁₀, PM_{2.5}, and TACs. The 2017 Clean Air Plan contains 85 control measures categorized based on the economic sector framework including stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, and water measures.

CEQA Guidelines and Thresholds of Significance

The *BAAQMD CEQA Air Quality Guidelines* is an advisory document that provides lead agencies, consultants, and project proponents with procedures for assessing air quality impacts and preparing environmental review documents. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects and plans would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

In May 2011, BAAQMD adopted an updated version of its thresholds of significance for use in determining the significance of environmental effects under CEQA and published its CEQA Guidelines for consideration by lead agencies. The 2011 CEQA Guidelines also included methods for evaluating risks and hazards for the siting of new sensitive receptors based on nearby, existing sources of risk (e.g. freeways).

The BAAQMD resolution adopting the significance thresholds in 2011 was set aside by the Alameda County Superior Court on March 5, 2012. On August 13, 2013, the California Court of Appeals issued a full reversal of the Superior Court's judgment, and on December 17, 2015, the California Supreme Court reversed in part the appellate court's judgment and remanded the case for further consideration consistent with the Supreme Court opinion. The California Supreme Court ruled unanimously that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project" (*California Building Industry Association v. Bay Area Air Quality Management District* [December 17, 2015] 62 Cal.4th 369). The Supreme Court confirmed that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future residents or users." The Court also held that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as

impacts of the project on “existing conditions” rather than impacts of the environment on the project.

BAAQMD most recently updated its *CEQA Air Quality Guidelines* in May 2017 (BAAQMD, 2017b). These guidelines provide recommended quantitative significance thresholds along with direction on recommended analysis methods. BAAQMD states that the quantitative significance thresholds are “advisory and should be followed by local governments at their own discretion,” and that lead agencies are fully within their authority to develop their own thresholds of significance. However, BAAQMD offers these thresholds for lead agencies to use in order to inform environmental review for development projects in the Bay Area. Lead agencies may also reference the *CEQA Thresholds Options and Justification Report* developed by BAAQMD staff in 2009. This option provides lead agencies with a justification for continuing to rely on the BAAQMD 2011 thresholds.

BAAQMD Rules and Regulations

As discussed earlier, the BAAQMD is the regional agency responsible for rulemaking, permitting and enforcement activities affecting stationary sources in the Bay Area. Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various uses and/or activities and identify specific pollution reduction measures that must be implemented in association with various uses and activities. These rules regulate not only emissions of the six criteria air pollutants, but also toxic emissions and acutely hazardous non-radioactive materials emissions. Emissions sources subject to these rules are regulated through the BAAQMD’s permitting process and standards of operation. Through this permitting process, including an annual permit review, the BAAQMD monitors generation of emissions from stationary sources and uses this information in developing its air quality plans. Any stationary sources of emissions proposed as part of the HEU (e.g. backup generators) would be subject to applicable BAAQMD Rules and Regulations.

The BAAQMD Rules and Regulations applicable to the HEU include, but are not limited to, the following:

- **Regulation 2, Rule 1 (General Permit Requirements), Rule 2 (New Source Review), and Rule 5 (New Source Review of Toxic Air Contaminants).** Under these rules, all stationary sources that have the potential to emit TACs above a certain level are required to obtain permits from BAAQMD. These rules provide guidance for the review of new and modified stationary sources of TAC emissions, including evaluation of health risks and potential mitigation measures. Any proposed emergency generators and fire pumps proposed as part of the HEU would be subject to these rules. The California Building Code Section 2702.2.15 requires emergency and standby power to be provided in buildings with occupied floors located more than 75 feet above the lowest level of fire department vehicle access. The BAAQMD recently updated its BACT requirement for emergency generators greater than 1,000 horsepower (hp) to achieve EPA Tier 4 standards (BAAQMD, 2021b). Fire pumps are essential components of a building's fire protection system, especially in taller structures and are critical in distributing water through sprinkler systems where water pressure from water mains and firefighting equipment cannot reach.

- **Regulation 6, Rule 6 (Prohibition of Trackout).** This measure controls trackout of solid material onto public paved roads from large bulk material sites, large construction sites, and large disturbed area sites. Under this regulation, the owners and operators of a construction site are required to clean up trackout on public roadways within four hours of identification and at the conclusion of each workday. The rule also includes requirements regarding the emissions of fugitive dust during cleanup of trackout, and requirements for monitoring and reporting trackout at regulated sites. Construction activities associated with development under the HEU would be subject to this rule.
- **Regulation 8, Rule 3 (Architectural Coatings).** Through this rule the BAAQMD regulates the quantity of VOCs in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured. This rule imposes VOC content limits on architectural coatings and includes requirements for painting practices, solvent usage and storage, and compliance monitoring and reporting practices. Application of architectural coatings associated with new construction and maintenance activities resulting from the HEU would be subject to this rule.
- **Regulation 9, Rule 8 (Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines).** This rule regulates emissions of NO_x and CO from stationary internal combustion engines and imposes emissions limits on spark-ignited engines powered by waste and fossil-derived fuels, compression-ignited engines, and dual fuel pilot compression-ignited engines. The rule also limits the hours of operation for emergency standby engines, which must be equipped with a non-resettable totalizing meter that measures either hours of operation or fuel usage. Usage records must be kept for two years and be available for inspection by BAAQMD. Any emergency generators proposed as part of development within the HEU area would be subject to this rule.
- **Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing).** This rule regulates emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing. It prohibits the use of asbestos on certain roadways, in molded insulating materials, and on buildings during construction, alteration, and/or repair. The rule also prohibits visible emissions from any operation involving the demolition, renovation, removal, manufacture, or fabrication of asbestos-containing products and includes required procedures for waste disposal and requirements for waste disposal sites to prevent emissions from asbestos-containing materials. This rule applies to demolition activities undertaken as part of development under the HEU.

Planning Healthy Places

In 2016, BAAQMD prepared its *Planning Healthy Places* guidebook to assist local governments, planners, elected officials, developers, community groups, and other parties in addressing and minimizing potential air quality issues associated with local sources of air pollutants, especially TACs and PM. The guidebook provides best management strategies to reduce emissions and human exposure to pollutants that can be implemented in city or county general plans, neighborhood or specific plans, land use development ordinances, or individual projects.

BAAQMD has developed a map identifying areas where best management practices should be applied, and where further study is needed (BAAQMD, 2016b). As shown on the Planning Healthy Places map, many of the HEU areas are located where the recommended best management practices should be applied to reduce exposure and subsequent health impacts

associated with air pollution. Best management practices recommended by the Planning Healthy Places guidebook include a number of emissions reduction strategies.

MTC/ABAG Sustainable Communities Strategy

The MTC is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes Santa Clara County and Mountain View. On July 18, 2013, *Plan Bay Area* was jointly approved by the ABAG's Executive Board and by MTC (MTC & ABAG, 2013). The plan includes the region's Sustainable Communities Strategy (SCS), as required under SB 375, and the 2040 Regional Transportation Plan. Though the purpose of the SCS is to lay out how the region will meet GHG emissions reduction targets set by CARB, by concentrating future growth within Priority Development Areas (PDAs) and Transit Priority Areas (TPAs), the reduction in VMT will also reduce associated air pollutant emissions.⁴ Some of the HEU areas are located within both a Priority Development Area and a Transit Priority Area (MTC, 2022).

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original *Plan Bay Area* (2013), but with updated planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC & ABAG, 2017).

Most recently, on October 21, 2021, the MTC and ABAG jointly adopted *Plan Bay Area 2050* as the official regional long-range plan for the Bay Area. *Plan Bay Area 2050* connects the elements of housing, the economy, transportation, and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). It will be several years before the regional transportation model and county transportation models are updated to reflect *Plan Bay Area 2050* (the models currently incorporate data from *Plan Bay Area 2040*).

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. Air quality goals and policies are contained in the Mobility and Infrastructure and Conservation elements of the General Plan. The following list includes the goals and policies in both of these elements (City of Mountain View, 2021).

⁴ To be eligible for designation as a Priority Development Area, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. A Transit Priority Area is an area within one-half mile of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes.

Mobility

Goal MOB-9: Achievement of state and regional air quality and greenhouse gas emission reduction targets.

Policy MOB 9.1: Greenhouse gas emissions. Develop cost-effective strategies for reducing greenhouse gas emissions in coordination with the Greenhouse Gas Reduction Program.

Policy MOB 9.2: Reduced vehicle miles traveled. Support development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita vehicle miles traveled.

Policy MOB 9.3: Low-emission vehicles. Promote use of fuel-efficient, alternative fuel and low-emission vehicles.

Infrastructure and Conservation

Goal INC-20: Clean, breathable air and strongly controlled city sources of air pollution.

Policy INC 20.1: Pollution prevention. Discourage mobile and stationary sources of air pollution.

Policy INC 20.2: Collaboration. Participate in state and regional planning efforts to improve air quality.

Policy INC 20.3: Pollution-reduction technologies. Encourage the use of non-fossil fuels and other pollution-reduction technologies in transportation, machinery and industrial processes.

Policy INC 20.4: Freight routes. Identify and maintain primary freight routes that provide direct access to industrial and commercial areas.

Policy 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.

Policy INC 20.6: Air quality standards. Protect the public and construction workers from construction exhaust and particulate emissions.

Policy INC 20.7: Protect sensitive receptors. Protect the public from substantial pollutant concentrations.

Policy INC 20.8: Offensive odors. Protect residents from offensive odors.

Mountain View Reach Codes

Reach Codes are amendments to the Energy and Green Building Standards Codes to reduce GHGs. Adopting Reach Codes create opportunities for local governments to lead initiatives on climate change solutions, clean air, and renewable energy. On November 12, 2019, the Mountain View City Council approved the Green Building Code amendments, which include the Reach Codes efforts. These include electrification, solar readiness of buildings, provision of EV charging infrastructure, and energy efficiency for all new construction projects. The Reach Codes establish higher standards for new construction to provide environmental and health benefits to

the community. The Mountain View Reach Codes focus on new residential, commercial, and multifamily buildings that will be seeking building permits after December 9, 2020. The ordinance does not apply to additions or alterations.

Mountain View Multimodal Transportation Analysis (MTA) Handbook

In February 2021, the City published the MTA Handbook, which provides a process for 1) assessing transportation operational effects of a development project or plan, and 2) identifying transportation improvements to address adverse effects. These identified improvements would be included as Conditions of Approval to projects and plans.

Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to air quality, as summarized below.

Air Quality

The applicant is required to secure a permit from the Bay Area Air Quality Management District or provide written assurance that no permit is required prior to issuance of a building permit.

Basic Air Quality Construction Measures

The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by the Bay Area Air Quality Management District (BAAQMD) to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures: (a) all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day; (b) all haul trucks transporting soil, sand, or other loose material off-site will be covered; (c) all visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited; (d) all vehicle speeds on unpaved roads will be limited to 15 mph; (e) all roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used; (f) 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 measures Title 13, Section 2485, of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points; (g) 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; and (h) post a publicly visible sign with the telephone number and person to contact at the City of Mountain View regarding dust complaints. This person will respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. Additional measures could also be required.

4.2.4 Significance Criteria

The thresholds used to determine the significance of impacts related to air quality are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- 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.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Approach to Analysis

This section analyzes impacts related to air quality that could occur from implementation of the HEU. It describes the methods used to determine impacts and lists the thresholds that were used to conclude whether an impact would be significant. Mitigation measures are identified as necessary to reduce or avoid significant impacts.

Criteria Air Pollutants

The analysis of criteria air pollutants on regional air quality has been conducted at a plan level using significance thresholds recommended by the BAAQMD for programs and plans (BAAQMD 2017b) and also considers whether future projects that implement the plan could result in significant impacts. For programs and plans, the BAAQMD recommends that the analysis consider a comparison of the rate of increase in VMT to the rate of population growth to assess impact on regional air quality. Projects are generally compared to the BAAQMD's project-level thresholds for criteria pollutants for construction and operation.

Toxic Air Contaminants

The BAAQMD's current plan-level thresholds for health risks focus on avoiding or minimizing exposure of future sensitive receptors proposed as part of a plan to existing health risks. However, as detailed below, impacts of the environment on a project are no longer required to be analyzed under CEQA unless a project exacerbates existing impacts (see Non-CEQA Impacts of the Environment on the Project below). The BAAQMD does not provide guidance or thresholds for the analysis of health risks of a plan on existing sensitive receptors. In the absence of guidance from the BAAQMD, the analysis presented below discusses the types of TAC sources that would be associated with future development under the HEU.

Health Effects of Criteria Air Pollutants

In a 2018 decision (*Sierra Club V. County of Fresno*, 6 Cal.5th 502, also referred to as *Friant Ranch*), the California Supreme Court decided that CEQA requires disclosure of the potential for a project's emissions to affect human health when the project's criteria air pollutant emissions exceed applicable thresholds and contribute considerably to a significant cumulative impact. The

decision requires EIRs to either: (1) make a “reasonable effort” to substantively connect the estimated amount of a given air pollutant a project will produce and the health effects associated with that pollutant, or (2) explain why such an analysis is infeasible.⁵

The Court also clarified that CEQA “does not mandate” that EIRs include “an in-depth risk assessment” that provides “a detailed comprehensive analysis ... to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population wide health risks associated with those levels of exposure.”⁶

Typically, the health impact of a particular criteria pollutant is analyzed by air districts on a regional scale, based on how close the area is to attaining the ambient air quality standards. Because BAAQMD’s attainment plans and supporting air quality modeling tools are regional in nature, they are not typically used to evaluate the impacts of individual projects and plans on ambient concentrations of criteria air pollutants, or to correlate those impacts to potential resultant effects on public health. The complex nature of dispersion of criteria air pollutants and the complex atmospheric chemistry (especially in the case of ozone and fine particulate matter) limit the usefulness of applying the available models to predict health impacts on a project level. The accumulation and dispersion of air pollutant emissions within an air basin depends on the size and distribution of emission sources in the region and meteorological factors such as wind, sunlight, temperature, humidity, rainfall, atmospheric pressure, and topography. Various air districts in California agree that it is very difficult to quantify health impacts and that the specific tools and methods to use are still under development. Therefore, the health effects of criteria pollutants generated by the implementation of the HEU are discussed qualitatively in this analysis.

Non-CEQA Impacts of the Environment on the Project

As discussed in the Regulatory Setting,⁷ CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project’s users or residents, except where a project would exacerbate an existing environmental condition. This analysis focuses on air quality impacts on the existing sensitive receptors from new emissions from the proposed HEU, during both construction and operational phases. Existing emissions from off-site sources are addressed under cumulative conditions.

⁵ *Sierra Club V. County of Fresno*, 6 Cal.5th at 510–511.

⁶ *Sierra Club V. County of Fresno*, 6 Cal.5th at 521.

⁷ *California Building Industry Association V. Bay Area Air Quality Management District*, 62 Cal.4th 369. Opinion Filed December 17, 2015.

4.2.5 Impacts of the Project

Impact AIR-1: Implementation of the HEU would not conflict with or obstruct implementation of the applicable air quality plan. (*Less than Significant*)

In determining consistency with the Clean Air Plan, BAAQMD recommends that the analysis consider whether the project would:

- Support the primary goals of the Clean Air Plan;
- Include applicable control measures of the Clean Air Plan; and
- Avoid disrupting or hindering implementation of control measures identified in the Clean Air Plan.

The primary goals of the 2017 Clean Air Plan are to protect air quality and public health at the regional and local scale and protect the climate by reducing regional criteria air pollutant emissions and reducing local air quality-related health risks (by meeting state and national ambient air quality standards). To meet these goals, the 2017 Clean Air Plan includes 85 control measures aimed at reducing air pollutants in the SFBAAB (BAAQMD, 2017c). These control measures are grouped into the following sectors: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, and waste management.

The vast majority of the control measures included in the 2017 Clean Air Plan do not apply directly to the HEU and subsequent development projects because they target facilities or land uses that do not currently exist and are not proposed in the HEU (e.g., energy generation, waste management, agricultural, forest or pasture lands); vehicles or equipment that would not be employed in the HEU area (e.g., airplanes, farming equipment); and/or involve rulemaking or other actions under the jurisdiction of agencies not directly involved with design and approval of the HEU and its related actions. For example, the Agriculture, Natural and Working Lands, and Water measures address emissions sources not applicable to the proposed HEU future developments, but rather the BAAQMD's own programs and regional air quality planning and are less applicable to local agencies' decisions and projects. In addition, 40 of these measures address stationary sources (such as oil refineries and cement kilns, and large boilers used in commercial and industrial facilities) and will be implemented by the BAAQMD using its permit authority and are therefore not suited to implementation through local planning efforts.

Most of the control measures identified in the Clean Air Plan fall under the implementation responsibility of the BAAQMD and would not be directly applicable to the HEU. However, subsequent projects proposed as part of the HEU would include features, either by design, required as part of compliance with regulations or their location close to transit facilities, that support implementation of transportation-, energy-, building-, waste-, and water conservation-related measures included in the 2017 Clean Air Plan. **Table 4.2-9** provides a consistency analysis of the proposed HEU with applicable control measures of the 2017 Clean Air Plan.

**TABLE 4.2-9
CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES
IN 2017 CLEAN AIR PLAN CONTROL MEASURES**

Control Measure	Description	Consistency Analysis
Stationary Source Control Measures		
SS21: New Source Review for Air Toxics	SS21 addresses air toxics emissions through BAAQMD Rule 2-5, New Source Review of Toxic Air Contaminants.	Consistent. Any stationary sources such as emergency generators proposed as part of the development in the HEU would be required to comply with BAAQMD Rule 2-5 at the time of project review.
SS25: Coating, Solvents, Lubricants, Sealants and Adhesives	SS25 will reduce emissions of ROG from architectural coatings and other materials by proposing more stringent ROG limits as appropriate.	Consistent. All subsequent projects in the HEU would comply with all applicable BAAQMD rules and regulations regarding ROG emission limits.
SS30: Residential Fan Type Furnaces	SS30 will reduce emissions of NOx by creating more stringent limits on new and replacement central furnace installations. Strategies may include regulations regarding sale of fossil fuel-based space and water heating systems for residential and commercial use.	Consistent. All subsequent projects in the HEU would be required to use all-electric space and water heating systems for residential and commercial use, consistent with the Mountain View Reach Code. Though the City's Reach Code allows for exemptions, Mitigation Measure GHG-1 in the Greenhouse Gas section of this EIR will require no exemptions to the all-electric requirement.
SS32: Emergency Backup Generators	S32 will reduce emissions of DPM, TACs, and criteria pollutants from emergency backup generators by enforcing Rule 11- 18, resulting in reduced health risks to impacted individuals. This measure will also have climate protection benefits through reduces GHG emissions.	Consistent. Any emergency backup generators proposed would be compliant with the regulations set forth in BAAQMD Rule 11-18.
SS36: PM from Trackout	SS36 developed Regulation 6, Particulate Matter; Rule 6: Trackout (Rule 6-6) to address mud and dirt that can be "tracked out" from construction sites, bulk material storage, and disturbed surfaces onto public paved roads where vehicle traffic will pulverize the mud and dirt into fine particles and entrain them into the air.	Consistent. All future construction activities associated with the proposed HEU would implement BMPs required by the BAAQMD, as part of City Standard Condition of Approval (Basic Air Quality Construction Measures), which would reduce trackout of PM from construction sites.
SS38 Fugitive Dust	SS38 reduces particulate matter (PM ₁₀ & PM _{2.5}) fugitive dust emissions from traffic and other operations on construction sites, large disturbed surfaces, and other sources of fugitive PM emissions.	Consistent. All future construction activities pursuant to the HEU would implement dust control BMPs required by the BAAQMD as part of City Standard Condition of Approval (Basic Air Quality Construction Measures), to reduce fugitive dust.
Transportation Control Measures		
TR5: Transit Efficiency and Use	TR5 will improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program.	Consistent. Projects would be located near the Valley Transportation Authority bus and light rail lines, where the Clipper® fare payment system can be used on various transit operators. It is noted that 511 no longer provides trip planner service or transit agency schedules.

**TABLE 4.2-9 (CONTINUED)
 CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES
 IN 2017 CLEAN AIR PLAN CONTROL MEASURES**

Control Measure	Description	Consistency Analysis
Transportation Control Measures (cont.)		
TR8: Ridesharing	TR8 promotes ridesharing services and incentives through the implementation of the 511 Regional Rideshare Program, as well as local rideshare programs implemented by Congestion Management Agencies. These activities will include marketing rideshare services, operating a rideshare information call center and website, and provide vanpool support services. In addition, this measure includes provisions for encouraging car sharing programs.	Consistent. Ridesharing services to the HEU area are available through the 511 Regional Rideshare Program as well as other private rideshare programs.
TR10: Land Use Strategies	This measure supports land use patterns that reduce VMT and associated emissions and exposure to TACs, especially within infill locations and impacted communities.	Consistent. The HEU would comply with this measure as it would locate high density, transit-oriented, mixed use development of land uses in an infill location. It would evaluate a mix of land uses including residential, office, and retail uses in close proximity of existing transit services, thereby reducing the number of vehicle trips and VMT. Some of the HEU areas are also located in a Priority Development Area and Transit Priority Area adjacent to the Transit Center which includes a regional Caltrain station and Transit Center served by light rail.
Energy Control Measures		
EN1: Decarbonize Electricity Production	EN1 focuses on lowering carbon emissions by switching the fuel sources used in electricity generation. The measure would promote and expedite a transition away from fossil fuels used in electricity generation (i.e., natural gas) to a greater reliance on renewable energy sources (e.g., wind, solar). In addition, this measure would promote an increase in cogeneration, which results in useful heat in addition to electricity generation from a single fuel source.	Consistent. Electricity supplied to development in the HEU area would be provided by Pacific Gas and Electric (PG&E) and Silicon Valley Clean Energy (SVCE). PG&E and SVCE are required to comply with SB 100 and the RPS.
Energy Control Measures (cont.)		
EN2: Decrease Electricity Demand	EN2 would decrease electricity demand through the adoption of additional energy efficiency policies and programs.	Consistent. Development under the HEU would be subject to energy efficiency standards enforced through the California Building Efficiency Standards (CCR, Title 24, Part 6), California Green Building Standards Code (CCR, Title 24, Part 11 - CALGreen). Buildings constructed as part of the HEU would be designed to comply with the most recent version of Title 24 Building Energy Efficiency Standards and mandatory CALGreen measures.
Buildings Control Measures		
BL1: Green Buildings	BL1 seeks to increase energy efficiency and the use of on-site renewable energy for all types of existing and future buildings. The measure includes policy assistance, incentives, diffusion of public information, and targeted engagement and facilitation of partnerships in order to increase energy efficiency and on-site renewable energy in the buildings sector.	Consistent. In addition to compliance with the most recent version of Title 24 Building Energy Efficiency Standards and mandatory CALGreen measures, subsequent development in the HEU area would be subject to the Mountain View Green Building and Reach Codes, which require, among other things, photovoltaic (PV) requirements.

TABLE 4.2-9 (CONTINUED)
CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES
IN 2017 CLEAN AIR PLAN CONTROL MEASURES

Control Measure	Description	Consistency Analysis
BL2: Decarbonize Buildings	BL2 seeks to reduce GHG emissions, criteria pollutants and TACs by limiting the installation of space- and water-heating systems and appliances powered by fossil fuels. This measure is to be implemented by developing model policies for local governments that support low- and zero-carbon technologies as well as potentially developing a rule limiting the sale of natural-gas furnaces and water heaters.	Consistent. Subsequent development pursuant to the HEU would be subject to the Mountain View Reach Code, which requires, among other things, all-electric construction for new residential and non-residential buildings with no natural gas infrastructure, and photovoltaic (PV) requirements. In addition, SVCE, a community choice aggregation, offers clean energy to City residents, and will be available to future residents of development proposed as part of the HEU.
BL4: Urban Heat Island Mitigation	This control measure aims to reduce the “urban heat island” phenomenon by increasing the application of “cool roofing” and “cool paving” technologies, as well as increasing the prevalence of urban forests and vegetation, through voluntary approaches and educational outreach.	Consistent. Development in the HEU would be required to be consistent with the Mountain View Heritage Tree Preservation Ordinance.
Natural and Working Lands Control Measures		
NW2: Urban Street Planting	NW2 promotes the planting of trees in urbanized settings to take advantage of the myriad benefits provided by these trees, including: shading to reduce both the “urban heat island” phenomenon and the need for space cooling, and the absorption of ambient criteria air pollutants as well as carbon dioxide.	Consistent. Development in the HEU area would be required to be consistent with the Mountain View Heritage Tree Preservation Ordinance.
Waste Management Control Measures		
WA3: Green Waste Diversion WA4: Recycling and Waste Reduction	WA3 seeks to reduce the total amount of green waste being disposed in landfills by supporting the diversion of green waste to other uses. WA4 seeks to reduce GHG emissions by diverting recyclables and other materials from landfills.	Consistent. Subsequent projects in the HEU area would be serviced by a waste hauler that offers residential and commercial composting services and that would be required to comply with the requirements of the California Integrated Waste Management Act and AB 341. Consistent with AB 341 - Commercial Recycling and AB 1826 - Commercial Organics, commercial, business, or multifamily establishments that generate two cubic yards or more of solid and organic waste per week will be required to have a recycling and/or organics program.
Water Control Measures		
WR2: Support Water Conservation	WR2 seeks to promote water conservation, including reduced water consumption and increased on-site water recycling, in residential, commercial and industrial buildings for the purpose of reducing GHG emissions.	Consistent. The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. Water to development as part of the HEU would be supplied by the City’s own water utility, which is required to comply with SB X7-7 standards. In 2018, Senate Bill 606 and Assembly Bill 1668 were passed that build on California’s ongoing efforts to make water conservation a way of life. They emphasize efficiency and stretching water supplies in cities and farms, and establish mandates for water budget planning and efficiency objectives for water suppliers, not individuals, homeowners, or businesses.

**TABLE 4.2-9 (CONTINUED)
 CONSISTENCY WITH POTENTIALLY APPLICABLE CONTROL MEASURES
 IN 2017 CLEAN AIR PLAN CONTROL MEASURES**

Control Measure	Description	Consistency Analysis
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and AB 341	IWMA requires all California cities to divert 50-percent of all solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. Recology Mountain View is under contract with the City to provide solid waste and residential recycling services to Mountain View and is responsible for recycling and solid waste management in the City. Recology's services yield waste diversion results consistent with citywide recycling targets. These services would be supplied to all future development under the HEU. Consistent with AB 341 - Commercial Recycling and AB 1826 - Commercial Organics, all commercial, business, and multifamily establishments that generate enough solid and organic waste are required to have a recycling and/or organics program.

As shown in Table 4.2-9, required compliance with regulations from various agencies as well as the City, and implementation of Mitigation Measure AIR-1 required to mitigate Impact AIR-2 discussed below, would ensure that implementation of the HEU would be consistent and support all applicable control measures from the 2017 Clean Air Plan.

Further, the proposed HEU would not cause the disruption or delay in the implementation of Clean Air Plan control measures. Projects that would hinder implementation of control measures are projects that would preclude the extension of a transit line or bike path or projects that propose excessive parking beyond City parking requirements. The HEU proposes development that would include housing near transit, including the Mountain View Transit Center, served by Caltrain and Valley Transportation Authority light rail.

In addition, some of the HEU areas are located within a Priority Development Area pursuant to the Association of Bay Area Governments' Sustainable Communities Strategy: Plan Bay Area 2040 (MTC/ABAG 2017). This designation applies to new development areas that would support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit. Further, the HEU would support infill development, an increase in the density of housing, and additional housing near transit. In areas where there is not a lot of transit, the City has historically imposed TDM requirements and a trip cap, so a lower number of vehicle trips is achieved.

The HEU would advance and would not obstruct implementation of any measures in the 2017 Clean Air Plan that aim to improve connectivity and reduce transportation-related emissions. Therefore, the proposed HEU would not hinder or delay implementation of any control measures contained in the 2017 Clean Air Plan and this impact would be *less than significant*.

Mitigation: None required.

Impact AIR-2: Implementation of the HEU would not 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. (Significant and Unavoidable with Mitigation)

For a plan-level analysis, the BAAQMD recommends that the significance of the impact of criteria air pollutant emissions generated be based on consistency with regional air quality planning, including an evaluation of population growth and growth in VMT (BAAQMD, 2017b). For a proposed plan to result in a less-than-significant impact from criteria air pollutants, an analysis must demonstrate that the plan’s growth in VMT would not exceed the plan’s population growth. This analysis is presented below, followed by a qualitative analysis that considers whether development allowed by the HEU could exceed quantitative (project-level) thresholds of significance for criteria pollutants, requiring mitigation.

Comparison of Growth in VMT with Growth in Population

Based on the transportation analysis, the population of the area due to development proposed as part of the HEU would increase by approximately 6.1 percent compared to the 2040 scenario without the HEU, as shown in **Table 4.2-10**.

**TABLE 4.2-10
 INCREASE IN VMT VERSUS POPULATION GROWTH**

	Cumulative Growth no HEU	Cumulative Growth with HEU	HEU Contribution to Cumulative Growth	% Increase
Population^a	134,000	142,200	8,200	6.1%
VMT^b	2,189,929	2,204,929	15,000	0.7%

NOTE:

- ^a Population increase based on the City’s projections which assumes persons-per-household factor of 2.0.
- ^b VMT estimations provided by Hexagon and represents VMT on all roads within the City of Mountain View.

The transportation analysis also estimates the increase in VMT associated with the HEU buildout, which is also shown in Table 4.2-10. The increase in daily VMT associated with the HEU buildout would represent a smaller increase than the population increase, when compared to the 2040 No Project scenario.

The BAAQMD Justification Report⁸ explains that the impact to air quality is not necessarily growth but where that growth is located. Because transportation sources typically constitute the largest percent of air quality emissions generated from land use development projects and plans, a comparison of the rate of increase in VMT to the population growth rate will determine if planned growth will impact air quality of the area. Compact infill development in proximity to transit services, such as many of the site in the HEU, inherently generate less vehicle travel and more transit opportunities than suburban sprawl to accommodate the same amount of growth. Because

⁸ BAAQMD staff analyzed various options for CEQA air quality thresholds of significance for use within BAAQMD’s jurisdiction. The analysis and evaluation undertaken by BAAQMD staff is documented in the Revised Draft Options and Justification Report – California Environmental Quality Act Thresholds of Significance (Draft Options Report) (BAAQMD October 2009).

the rate of increase in VMT would be less than the rate of population growth, the HEU would result in a *less-than-significant* impact with respect to regional criteria air pollutants when analyzed by comparing the rate of population growth to the rate of VMT growth.

Nonetheless, the HEU would allow for development of new residential uses and replace existing uses in the area, which would generate emissions. This development would entail demolition and removal of existing structures, excavation, site preparation, and construction of new buildings. Emissions generated during construction activities would include exhaust emissions from the use of heavy-duty off-road diesel equipment, on-road diesel trucks, and employee vehicles; fugitive dust emissions associated with earth-disturbing activities and other demolition and construction work; and fugitive ROG emissions from paving and architectural coatings. Emissions generated during operation of new development would include emissions from motor vehicle trips, building energy use, and any stationary sources such as backup generators and area sources (landscaping equipment, consumer products and architectural coatings associated with maintenance activities).

Screening criteria based on development type and size (Table 3-1 of the *2017 BAAQMD CEQA Air Quality Guidelines*) are generally used to determine if construction or operational emissions from individual projects would likely result in a cumulatively considerable net increase in non-attainment criteria air pollutants. A project that exceeds the screening criteria generally requires a detailed air quality assessment to determine whether criteria air pollutant emissions would exceed significance thresholds (BAAQMD, 2017b). Projects below the screening criteria do not require future analysis, and the impact of criteria pollutant emissions from those projects are presumed to be less than significant.

Construction Emissions

Activities that generate dust include demolition, grading and excavation, and equipment movement on unpaved construction areas. Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Fugitive dust from construction activities can also be wind-blown and that adds to the particulate matter concentrations in the local atmosphere leading to *potentially significant* impacts.

The BAAQMD has taken a qualitative approach to addressing fugitive dust emissions from construction activities and considers any project that implements the BAAQMD Basic Construction Mitigation Measures Recommended for All Projects (Best Management Practices) to not result in a significant impact with respect to fugitive dust. City of Mountain View Standard Condition (Basic Air Quality Construction Measures), includes BAAQMD-recommended measures to address construction dust and would apply to all subsequent projects developed as part of the HEU.

Estimating exhaust emissions generated by construction activities (i.e. construction equipment and vehicles) requires project-specific data regarding the construction schedule and phasing, and equipment needs (equipment type and number, horsepower, activity level). If estimated emissions are found to exceed the BAAQMD's project-level significance thresholds for construction, they would contribute to a cumulatively considerable net increase in criteria pollutants for which the SFBAAB is in nonattainment. Projects requiring substantial ground disturbance, constructed on

extremely compressed construction schedules, or requiring specialty equipment could lead to exceedance of the significance thresholds. Because at least some development allowed by the HEU would likely exceed BAAQMD screening criteria, and the specific characteristics of each subsequent project are not currently known, this impact is conservatively considered to be *potentially significant*.

Operational Emissions

Individual projects allowed by the HEU would generate operational emissions from a variety of sources. The primary operational sources of emissions are motor vehicle trips generated by the proposed land uses, energy use in buildings, area sources (landscaping equipment, use of consumer products, re-application of architectural coatings as part of maintenance activities, etc.), and any stationary sources such as diesel fueled fire pumps and emergency generators. As described below, exceedances of the significance thresholds in larger projects are likely to result from NO_x and PM emissions from transportation sources, NO_x emissions from energy use, and ROG emissions from area sources, specifically consumer products.

The primary source of operational criteria pollutant emissions would be motor vehicle trips generated by new development, although the proximity of transit facilities in the area would help reduce vehicle trips, VMT, and associated air pollutant emissions, as would Mountain View's TDM requirements. In addition, Mountain View has adopted amendments to the City's Chapter 8 Building code, approving "Reach Codes" that amend the State's Title 24 Energy and Green Building Standards Codes and specifies EV charging requirements for new construction to facilitate future installation and use of electric chargers (City of Mountain View 2019). Reach codes are local building energy codes that "reach" beyond the state minimum requirements for energy use in building design and construction. The Mountain View Reach Codes apply to all new residential, commercial, and multifamily buildings. Mitigation Measure GHG-1, discussed in Chapter 4.7 Greenhouse Gases, would require that EV charging infrastructure be provided consistent with the applicable Tier 2 CALGreen standards in effect at the time. The provision of EV charging would encourage use of electric vehicles and reduce associated criteria pollutant emissions from gasoline-fueled vehicles.

The second major source of criteria pollutant emissions in land use development projects is energy use in buildings from the combustion of natural gas for space and water heating. However, consistent with the City's Reach Codes, all newly constructed buildings would be required to be all-electric buildings. An all-electric building is a building that has no natural gas or propane plumbing installed within the building and that uses electricity as the source of energy for its space conditioning, water heating (including pools and spas), cooking appliances, and clothes drying appliances (City of Mountain View, 2019). Exemptions may be granted to non-residential buildings containing kitchens and residential buildings that contains only low income units as long as the natural gas burning devices do not have a continuously burning pilot light. However, implementation of Mitigation Measure GHG-1 in Chapter 4.7 of this EIR would require all future projects in the Plan-wide amendments area to be all-electric and to be constructed without natural gas infrastructure. This would eliminate direct air pollutant emissions from building energy use.

ROG emissions from projects that include a substantial residential component may also potentially exceed the BAAQMD thresholds. ROG emissions from residential uses are primarily generated from the use of consumer products which are chemically formulated products used by household and institutional consumers, including, but not limited to, degreasers, fertilizers/pesticides, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. With transportation-related emissions of ROG decreasing over time from stricter controls on air pollution, the relative importance of emissions from consumer products has increased. Studies estimate that consumer products now contribute as much to urban air pollution as tailpipe emissions from vehicles despite the fact that people use a lot more fuel than they use consumer products—about 15 times more by weight (Fell, 2018).

Current methodology for estimating ROG emissions from consumer products uses the most recent version of the California Emissions Estimator Model (CalEEMod 2020.4.0) which relies on the 2008 CARB Consumer Product Emission Inventory (CARB, 2009). These emission factors have not been updated recently to reflect low emission products available in the market and are therefore conservative. In addition, consumer product emissions are largely based on personal choices and usage patterns of consumers that the city does not have control over. Hence, there are no effective mitigation measures restricting the use of certain consumer products or limiting the choice. ROG emissions from consumer products are regulated by CARB through the California Consumer Products Regulations (Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5).

Based on the potential for NO_x, PM, and ROG emissions from development projects allowed by the HEU to exceed significance thresholds, operational emissions of criteria pollutants are considered *potentially significant*.

Measure AIR-1 would require a quantitative analysis of projects exceeding the BAAQMD's screening criteria for criteria pollutant emissions and specifies emission reduction measures that shall be implemented if significance thresholds for criteria pollutants are exceeded.

Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.

Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.

In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.

Clean Construction Equipment.

1. The project applicant shall use electric construction equipment when feasible.
2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement must state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract.

The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.

3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.

Operational Emission Reductions

1. Projects shall be constructed without natural gas infrastructure and shall be “all electric.”
2. As required by Mitigation Measure GHG-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time.
3. Project applicants that do not screen out from VMT impact analysis shall implement VMT reduction measures as required by Mitigation Measure TRA-1.

Significance after Mitigation.

Mitigation Measure AIR-1 is expected to be effective at reducing criteria pollutant emissions from construction and operation of individual projects developed in the HEU area to below the BAAQMD thresholds; however, the specific emissions associated with

future projects are not currently known, and therefore the effectiveness of emission reduction measures cannot be definitively determined. It is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction significance thresholds, particularly if the Tier 4 Final equipment required by the mitigation measure is not commercially available. Also, ROG emissions from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the proposed HEU would conservatively be *significant and unavoidable with mitigation*.

The identification of this significant and unavoidable impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for subsequent projects that are below the applicable screening criteria or that meet the criteria air pollutant thresholds of significance with implementation of Mitigation Measure AIR-1.

Health Implications of Significant Impacts Related to Ozone Precursors

The health effects associated with emissions of criteria pollutants and ozone precursors are described in Table 4.2-1 under Section 4.2.1, *Environmental Setting* above. The main health concern of exposure to ground-level ozone formed from ROG and NO_x, the ozone precursors, is the effect on the respiratory system, especially on lung function.

As discussed above, although the HEU as a whole would be considered to result in a less than significant impact, individual projects could generate criteria pollutant emissions ROG, NO_x, and particulate matter during construction and/or operation that exceed the BAAQMD's project-level thresholds. In the absence of project-specific information, it would be speculative to quantify criteria pollutant emissions and these impacts have been assessed qualitatively, resulting in programmatic mitigation measures that would apply to future development projects. Without quantification of criteria pollutant emissions, it is not possible to quantify the health impacts of these emissions on sensitive receptors. There is also currently no guidance or thresholds for a significance determination regarding health effects from criteria pollutant emissions.

Significance after Mitigation: Significant and unavoidable

Impact AIR-3: Implementation of the HEU would not expose sensitive receptors to substantial pollutant concentrations. (*Less than Significant with Mitigation*)

The BAAQMD 2017 Guidelines recommend analysis of local community risk and hazards of plans by the following criteria:

- Presence of sensitive receptors around existing and planned sources of TACs (including adopted Risk Reduction Plan areas); and
- Presence of sensitive receptors within 500 feet from all freeways and high-volume roadways

According to these criteria, impacts would be significant if the HEU would introduce sensitive receptors in the vicinity of existing and planned sources of TACs, such as freeways and high-volume roadways. However, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's users or residents. Nonetheless, this analysis considers the potential for new receptors to be exposed to TAC emissions from existing TAC sources for informational purposes.

Many of the HEU development areas are within 500 feet of U.S. 101 and State Routes (SR) 85 and 237, numerous stationary sources, mostly diesel backup generators (BAAQMD 2022b), and the Caltrain line. Cancer risk and PM_{2.5} levels near these sources of TAC are already exposing sensitive receptors to substantial pollutant concentrations.

Health Risks from HEU Future Development Projects

The BAAQMD does not provide any guidance to analyze health risk impacts of plans on the environment. Nonetheless, subsequent projects developed under the HEU would generate TACs, primarily DPM, during construction and operation. DPM emissions would be generated from the combustion of diesel fuel in construction equipment and heavy-duty trucks transporting materials and equipment to and from individual project sites. Based on the land uses proposed in the HEU, the likely sources of operational TAC emissions would be any proposed emergency generators (required for residential structures over 75-feet) and truck traffic serving the commercial uses in the HEU area.

Construction

As the specific characteristics of each subsequent project proposed under the HEU and the required construction equipment information (year and duration of construction, equipment type, operating hours, horsepower, etc.) are not known, it is not possible to quantify construction-related health risks from exposure to TAC emissions from all projects in the HEU area.

As discussed under Impact AIR-2, projects that are below the BAAQMD screening sizes are not expected to have a significant impact from criteria pollutant emissions. However, for health risks, the severity of the impact depends on the proximity of the emissions-generating activity to sensitive receptors, the meteorological conditions, and the duration of exposure. Therefore, to evaluate the significance of the impacts from construction of individual development projects, a health risk assessment would be required to determine whether health risk levels would exceed significance thresholds of 10 in one million cancer risk and 0.3 µg/m³ annual PM_{2.5} concentrations.

Operations

Operational emissions would be predominantly generated by new vehicle trips, expected to be mainly gasoline-powered passenger vehicles, which do not emit a substantial amount of TACs. However, vehicles emitting fugitive PM_{2.5} in the form of road dust, brake wear, and tire wear, could exceed BAAQMD's PM_{2.5} concentration significance threshold.

Operational sources of health risk from HEU development projects would primarily include emergency generators fire pumps required in taller buildings as part of the emergency power systems and standby power systems requirement of the California Building Code for high-rise buildings with occupied floors located more than 75 feet from the lowest level of fire department vehicle access. Installation and operation of fire pumps and emergency diesel generators would require an Authority to Construct and Permit to Operate from the BAAQMD, who would evaluate emissions based on size and require Best Available Control Technology, if warranted. Per its Policy and Procedure Manual, the BAAQMD would deny an Authority to Construct or a Permit to Operate for any new or modified source of TACs that exceeds a cancer risk of 10 in one million or a chronic or acute Hazard Index of 1.0, the BAAQMD's thresholds for health risk impacts. Therefore, health risks associated with operational sources proposed as part of the HEU would be *less than significant*.

Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.

Project applicants within the HEU area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD's health risk significance thresholds for projects.

In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AIR-1's requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less than significant level. In addition, all tower cranes, forklifts, man- and material- lifts shall be electric powered.

Significance After Mitigation: Mitigation Measure AIR-2 would require subsequent projects within 1,000 feet of existing or approved sensitive receptors to undergo a project-level HRA at the time the project is proposed and to utilize the clean construction equipment required by Mitigation Measure AIR-1 if the project-specific health risk thresholds are exceeded. Implementation of Mitigation Measure AIR-2 would reduce construction health risk impacts to *less than significant with mitigation* by use of clean construction equipment that meet the Tier 4 Final off-road emission standards, or equivalent VDECS, as certified by CARB.

Impact AIR-4: Implementation of the HEU would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (*Less than Significant*)

The use of construction equipment at future construction sites in the HEU could potentially create objectionable odors that may affect receptors in the immediate vicinity. Construction-related odors would be localized and temporary, and the use of low-VOC surface coating materials in accordance with BAAQMD Rules would reduce potentially objectionable odors from painting operations. Land uses proposed as part of the HEU are not expected to generate odors that would

adversely affect a substantial number of people. The impact would be *less than significant*, and no mitigation measures would be required.

Mitigation: None required.

4.2.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to air quality could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on air quality is the SFBAAB.

The SFBAAB is a nonattainment area for both the federal and state ozone standards; therefore, a cumulative air quality impact already exists. Additional emissions of ozone precursors NO_x or ROG over threshold amounts would further degrade air quality related to ozone. Impact AIR-2 evaluates whether the HEU's contribution to this significant impact would be considerable and concludes that the impact would be significant and unavoidable after mitigation. For this reason, no further analysis of cumulative criteria pollutants is necessary.

Impact AIR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of sensitive receptors to substantial levels of fine particulate matter (PM_{2.5}) and TACs under cumulative conditions. (*Less than Significant Impact with Mitigation*)

Many sources of TACs are already present in the vicinity of the HEU development areas: U.S. 101 and State Routes (SR) 85 and 237, numerous stationary sources, mostly diesel backup generators (BAAQMD 2022b), and the Caltrain line. Cancer risk and PM_{2.5} levels near these sources of TAC are already exposing sensitive receptors to substantial pollutant concentrations. Health risk impacts from construction of residences within the HEU areas could combine with risks from these existing TAC sources that would exceed BAAQMD cumulative risk thresholds. However, future development under the HEU would not cause a significant contribution to these existing risk levels, as shown in Impact AIR-3. Therefore, this impact would be less than significant with incorporation of Mitigation Measure AIR-2.

Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.

Significance after Mitigation: Less than significant

Impact AIR-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not combine with other sources of odors that would adversely affect a substantial number of people. (*Less than Significant*)

Impact AIR-4 describes the potential of odorous emissions from the HEU. Development under the HEU would be residential and would not include land uses that are identified by the BAAQMD as common odor sources. Therefore, there is no potential for the HEU to combine with cumulative projects to result in a significant cumulative odor impact. Therefore, this impact would be less than significant.

Mitigation: None required.

4.2.7 Summary of Air Quality Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact AIR-1: Implementation of the HEU would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	None required	-
Impact AIR-2: Implementation of the HEU 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.	Potentially Significant	Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants	Significant and Unavoidable
Impact AIR-3: Implementation of the HEU would not expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction	Less than Significant
Impact AIR-4: Implementation of the HEU would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less than Significant	None required	-
Impact AIR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of sensitive receptors to substantial levels of fine particulate matter (PM _{2.5}) and TACs under cumulative conditions.	Potentially Significant	Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction	Less than Significant
Impact AIR-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not combine with other sources of odors that would adversely affect a substantial number of people.	Less than Significant	None required	-

4.2.8 References

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4.3 Biological Resources

4.3.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on Biological Resources. This section first includes a description of the existing environmental setting as it relates to Biological Resources, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on Biological Resources.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022, and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to Biological Resources received during the NOP comment period were received from the California Department of Fish and Wildlife (CDFW) and included concerns related to impacts to local special-status species, including various salt marsh species such as; western pond turtle (*Emys marmorata*), northern harrier (*Circus cyaneus*), burrowing owl (*Athene cunicularia*), salt-marsh harvest mouse (*Reithrodontomys raviventris*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), longfin smelt (*Spirinchus thaleichthys*), salt-marsh wandering shrew (*Sorex vagrans halicoetes*), saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), and Alameda song sparrow (*Melospiza melodia pusillula*), and appropriate mitigation to minimize impacts; bird strike potential on buildings adjacent to avian habitat; and potential impacts to wetland and riparian features.

The primary information sources used to prepare this section include the following:

- Historic and current aerial imagery available on Google Earth
- Subscription-based biological resource databases including the CDFW California Natural Diversity Database (CNDDB) (CDFW, 2022), CNPS Rare Plant Inventory (CNPS, 2022), and a U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation Official Species List (USFWS, 2022)
- The 2030 General Plan (City of Mountain View, 2021)
- North Bayshore Precise Plan (City of Mountain View, 2014)

4.3.2 Environmental Setting

Regional Setting

The Project is located in the Central California Coast Bioregion in Santa Clara County, which has a mild Mediterranean climate with generally warm, dry summers and cool, wet winters. The city and its Project comprise approximately 10,475 acres at the northwest end of the low-lying alluvial plain of the Santa Clara Valley, which is bounded to the north by San Francisco Bay, to the west by the Santa Cruz Mountains, and to the east by the Diablo Range. Stevens Creek and Permanente Creek, both of which originate in the Santa Cruz Mountains and flow north to San Francisco Bay, are the primary watercourses within the Mountain View City limits, while Adobe

Creek runs parallel to a small portion of the western City boundary. Permanente Creek consists of a cement-lined flood control channel for the majority of its length within City limits (except the southern reach from the city boundary to Cuesta Drive, and the northern reach from the Highway 101 to Mountain View Slough), while Stevens Creek has more of a natural character with a gravel and soil streambed and earthen banks. Stevens Creek becomes Whisman Slough as it approaches the Bay, while Permanente Creek becomes Mountain View Slough. Charleston Slough, a portion of which is a former salt pond (i.e., Inner Charleston Slough), connects to the Bay at the northwestern corner of the city limits (City of Mountain View, 2021).

Local Setting

Habitat types and land use in the Project have not changed appreciably since those characterized in the 2030 General Plan. The Project occurs mostly within the developed urban footprint of the city, within the boundaries of adopted Precise Plans and commercial corridors. Undeveloped areas within City limits occur principally near Shoreline Regional Park in the northern portion of the Project and creek corridors. Shoreline Regional Park supports much of the grassland, tidal marsh/mudflat, and open water habitats within the city limits; however, as identified in Project Description Figure 2, these areas and associated sensitive habitats are outside of the North Bayshore Precise Plan; and hence outside of the HEU planning area. Woodland habitat within the City occurs on the Stevens Creek corridor (City of Mountain View, 2021). The following section describes the vegetation communities and associated habitat types in the HEU in more detail.

Vegetation Communities/Habitat Types and Associated Wildlife Species

A *vegetation community* is a recognizable collection of plant species that interact with each other and the elements of their environment and are distinct from adjacent vegetation communities.¹ The terrestrial plant community classification presented in this assessment is based on field observations and the *Preliminary Descriptions of the Terrestrial Natural Communities of California*.² Plant communities generally correlate with wildlife habitat types. Developed and ruderal (disturbed) habitat does not fall within recognized vegetation communities and is presented as a habitat type. The 2030 General Plan identifies the following habitat types within the 10,475-acre Project area:

- Developed/Landscape/Ruderal
- Grassland
- Woodland
- Tidal Marsh or Mudflat

¹ Holland, R. F., 1986, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, California Department of Fish and Game.

² Holland, R. F., 1986, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, California Department of Fish and Game.

The following subsections describe these communities and their locations in the study area.

Developed/Landscape/Ruderal

Developed. Developed lands, which constitute the majority of the Project Area, include residential neighborhoods; commercial and industrial buildings; roads; schools; golf courses; and urban parks and associated landscaping consisting of lawns, ornamental trees, and ornamental shrubs. Many commercial and industrial buildings (e.g., Google campus) also have extensive maintained lawns and ornamental landscaping.

Ornamental trees in the developed portions of the Project are primarily non-native but include some native species. Common ornamental trees and shrubs in the City include: deodar cedar (*Cedrus deodara*), camphor (*Cinnamomum camphora*), Italian cypress (*Cupressus sempervirens*), blue gum (*Eucalyptus globulus*), sweet gum (*Liquidambar styraciflua*), southern magnolia (*Magnolia grandiflora*), oleander (*Nerium oleander*), London plane (*Platanus x. acerifolia*), California pepper tree (*Schinus molle*), and Mexican fan palm (*Washingtonia robusta*), among many others. Native but non-local trees in developed areas include Monterey pine (*Pinus radiata*), Douglas fir (*Pseudotsuga menziesii*), and coast redwood (*Sequoia sempervirens*). Coast live oak (*Quercus agrifolia*) and valley oak (*Q. lobata*) are local native species that occur in developed areas of the Project.

Most of the urban parks within the Project are considered developed because they consist of playgrounds, picnic areas, fields, and ornamental landscaping. Some exceptions to this include undeveloped portions of Shoreline Regional Park.

Ruderal. Ruderal habitat is comprised of individuals or large patches of disturbed, often barren habitat, within areas that are comprised primarily of non-native plants adapted to colonizing and persisting in disturbed areas. Such habitat is limited within the mostly developed Project area. The species composition is usually comprised of weedy, herbaceous forbs, non-native annual grasses, and ornamental plants, but some native species are also typically present. Ruderal habitat is present on the levee banks and other disturbed areas in the vicinity of lower Stevens Creek, Whisman Slough, Mountain View Slough, Charleston Slough, the Bayview Parcel, Permanente Creek, and NASA Ames Research Center. The Bayview Parcel may have been used most recently for dry land farming and consists mostly of non-native annual grasses and herbs. Small areas within the Bayview Parcel may have seasonally wet patches of grassland. Ruderal habitat was also observed occurring sporadically along the northern edges of Shoreline Regional Park. Sweet fennel (*Foeniculum vulgare*), bristly ox-tongue (*Picris echioides*), broad-leaved peppergrass (*Lepidium latifolium*), wild radish (*Raphanus sativus*), and others, occur in patches and interspersed with wild oats and soft chess. Native species that occur in ruderal areas include coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), and gumplant (*Grindelia stricta* var. *angustifolia*) (City of Mountain View, 2021).

Grassland

Most grasslands in and near the Project occur in the vicinity of Shoreline Regional Park, north of the HEU planning area. This habitat type is dominated by non-native annual grasses and includes native and non-native forbs. Native habitat restoration areas at Vista Slope and Shoreline Regional Park are more likely to support native grasses, forbs, and trees.

Typical non-native plant species in grasslands include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian thistle (*Carduus pycnocephalus*), yellow star-thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), Bermuda grass (*Cynodon dactylon*), stinkwort (*Dittrichia graveolens*), sweet fennel, fireweed (*Epilobium brachycarpum*), stork's bill (*Erodium cicutarium*), summer mustard (*Hirschfeldia incana*), hare barley (*Hordeum leporinum*), Italian ryegrass, common mallow (*Malva neglecta*), bur-clover (*Medicago polymorpha*), prickly oxtongue (*Picris echioides*), smilo grass (*Piptatherum miliaceum*), cut-leaf plantain (*Plantago coronopus*), curly dock (*Rumex crispus*), Russian thistle (*Salsola tragus*), milk thistle (*Silybum marianum*), clover (*Trifolium* sp.), and brome fescue (*Vulpia* sp.). These species are common, nonnative grasses and forbs that typically occur in non-native grasslands throughout the Bay Area and are expected to occur throughout grassland habitats within the Project.

Native grasses and forbs observed in this habitat include clarkia (*Clarkia* sp.), California golden poppy (*Eschscholzia californica*), and purple needlegrass (*Nassella pulchra*). Coyote brush, a native shrub, occurs in scattered locations, particularly at Vista Slope. Native tree and shrub species observed in restoration areas include manzanita (*Arctostaphylos manzanita*), coast live oak, and valley oak (City of Mountain View, 2021).

Woodland

Woodland habitats within the Project consist of three broadly defined vegetation series: (1) coast live oak woodland, consisting of woodlands where coast live oak is the sole or dominant tree in the canopy; (2) eucalyptus, a closed-canopy system dominated by blue gum or other eucalyptus species; and (3) mixed riparian woodland, which is co-dominated by riparian species such as arroyo willow, black cottonwood, and/or white alder (City of Mountain View, 2021). Woodland habitats primarily occur along Stevens Creek and Permanente Creek, which would generally be avoided by HEU activities, and are described below.

Coast Live Oak Woodland. Coast live oak woodland occurs along the upland stream banks and terraces of Stevens Creek and the western, unchannelized section of Permanente Creek. Coast live oaks are not the only trees along these creeks, but in some areas they dominate the canopy layer. Other tree species observed along Stevens Creek include a mix of native and non-native species such as red ironbark eucalyptus (*Eucalyptus sideroxylon*), Lombardy poplar (*Populus nigra*), glossy privet (*Ligustrum lucidum*), Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), big leaf maple (*Acer macrophyllum*), California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), California black walnut (*Juglans californica*), valley oak, and California pepper tree. The understory along Stevens Creek includes a mix of native and non-native herbs and shrubs including California rose (*Rosa californica*), coffeeberry (*Rhamnus californica*), blue elderberry (*Sambucus mexicana*), toyon (*Heteromeles arbutifolia*), California blackberry (*Rubus ursinus*), English ivy (*Hedera helix*), and annual grasses (City of Mountain View, 2021). The western segment of Permanente Creek that runs from western boundary of the Project to Cuesta Avenue at Miramonte Avenue has a canopy that is mostly coast live oak with the exception being near the Saint Francis High School where Monterey pine shares canopy dominance. Other ornamental trees can be found along the banks here as well and the understory consists of non-native herbs and grasses including Oregon manroot (*Marah fabaceus*), bedstraw

(*Galium aparine*), greater periwinkle (*Vinca major*), small-leaf spiderwort (*Tradescantia fluminensis*), ground cover juniper (*Juniperus sp.*), smilo grass, English ivy, California buckeye, toyon, and California blackberry (City of Mountain View, 2021). Although not considered as coast live oak woodland, large solitary coast live oaks can be found growing throughout the Project in residential and industrial parcels as well as within and around old agricultural areas such as the Grant/Levin and Francia properties and the western part of Cuesta Park.

Eucalyptus. Eucalyptus woodland ranges from monotypic blue gum stands with little or no understory to scattered trees with a well-developed understory. The best example of this habitat type occurs along the banks of Stevens Creek north of Sleeper Park where the woodland contains an assemblage of blue gum, coast live oak, and Monterey pine. The upland creek banks adjacent to Sleeper Park support an understory of native and non-native forbs including common geranium (*Pelargonium hortorum*), elm-leaf blackberry (*Rubus ulmifolius*), Catalina cherry (*Prunus lyonii*), dandelion (*Taraxacum officinale*), cotoneaster (*Cotoneaster lacteus*), cheeseweed (*Malva parviflora*), toyon, Oregon manroot, bedstraw, and various annual grasses (City of Mountain View, 2021).

Mixed Riparian Woodland. Mixed riparian woodland is dominated by riparian tree species that are adapted to wetland stream banks, floodplains and creek terraces that are seasonally flooded or permanently saturated by freshwater. Mixed riparian woodland is abundant along Stevens Creek and is also associated with freshwater marsh habitats, including the detention basin west of the Charleston Pump Station, as well as freshwater ditches associated with the open space and golf course at Shoreline Regional Park. Mixed riparian woodland along Stevens Creek generally supports a dense, well-developed canopy of riparian trees that include both native and non-native trees. Native trees observed along Stevens Creek include arroyo willow (*Salix lasiolepis*), white alder (*Alnus rhombifolia*), blue elderberry (*Sambucus mexicanus*), black cottonwood (*Populus balsamifera* subsp. *trichocarpa*), valley oak, California buckeye, California black walnut, California wax myrtle, Fremont cottonwood, and coast live oak. Non-native ornamental trees observed along Stevens Creek include Oregon ash (*Fraxinus latifolia*), Chinese elm (*Ulmus parvifolia*), and Modesto ash. Understory vegetation is comprised of a mixture of annual and perennial species including giant reed (*Arundo donax*), English ivy, German ivy, elm-leaf blackberry, and other herbaceous grasses and forbs (City of Mountain View, 2021).

Tidal Marsh or Mudflat

Tidal marsh is a highly productive community consisting of salt tolerant, hydrophytic plants that form moderate to dense cover. Plants are usually segregated vertically depending on their tolerance of inundation and saline soils. This habitat type is typically associated with and occurs adjacent to intertidal mudflats that are devoid of vegetation; during an ebb tide, the bottom is bare mud, cobble, or rock. Within the Project, this habitat type is strictly limited to the lower, tidal portions of Stevens Creek and Permanente Creek. Areas outside of the HEU planning area include Mountain View Slough, Whisman Slough, Stevens Creek Tidal Marsh, Mountain View Marsh, Charleston Slough, Coast Casey Forebay, and marshes near the mouths of Mountain View and Whisman Sloughs adjacent to the Bay (i.e., north of salt ponds A1 and A2W).

The tidal portions of Stevens Creek and Permanente Creek within the Project are similar in vertical structure, starting at the low elevation mudflat to the upland vegetation on adjacent levees. The

lowest elevation vegetation strata contain dense stands of pickleweed (*Salicornia virginica*) co-dominating places with saltgrass (*Distichlis spicata*) that are interspersed with areas of open water (or mudflat at low tide). Pickleweed and saltgrass are dominant components on the elevated benches of the tidal marsh where patches of alkali heath (*Frankenia salina*), gumplant (*Grindelia stricta* ssp. *angustifolia*), and cordgrass (*Spartina* sp.). The upland vegetation on the surrounding levees is dominated by non-native grasses and ruderal herbs that may support black mustard (*Brassica nigra*), tall wheatgrass (*Elytrigia pontica*), and smilo grass. The western portion of this marsh is included in the Stevens Creek Nature Study Area owned and managed by the Midpeninsula Regional Open Space District (MROSD) (City of Mountain View, 2021).

Special-Status and Protected Species

The term *special-status species* refers to plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or currently are, listed as rare, threatened, or endangered by the federal and/or state governments. Such species are legally protected under the federal and/or state Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the regulatory and scientific community to qualify for protection. The term *special-status species* includes the following:

- Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (Code of Federal Regulations Title 50, Section 17.12 [listed plants] and Section 17.11 [listed animals] and various notices in the *Federal Register* [FR] [proposed species]);
- Species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (California Code of Regulations Title 14, Section 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code [CFGF] Section 1900 et seq.);
- Animals fully protected under the CFGF (Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380); and
- Plants considered by CDFW and the California Native Plant Society (CNPS) to be “rare, threatened or endangered in California” (California Rare Plant Rank 1A, 1B, and 2).

A list of special-status plant and wildlife species that were considered within the HEU planning area is presented in **Table 4.3-1**. The CNDDDB (CDFW, 2022) and CNPS (2022) Rare Plant Inventory were queried based on a search of a 5-mile radius from the HEU and associated 7.5-minute U.S. Geological Survey quadrangles, respectively. The USFWS *Official List of Federal Endangered and Threatened Species that Occur in or May Be Affected by the Projects* (USFWS, 2022) was queried based on a 5-mile radius of the project sites. No critical habitat occurs within

the HEU sites (USFWS, 2022). These queries formed the basis to examine the potential for various special-status plant and wildlife species to occur in the study areas.

**TABLE 4.3-1
 SPECIAL-STATUS SPECIES POTENTIAL TO OCCUR IN THE HEU STUDY AREA**

Common Name Scientific Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence
Fish			
Central California Coast Steelhead <i>Oncorhynchus mykiss irideus</i>	FT/CSC/--	Spawns and rears in coastal streams between the Russian River and Aptos Creek, as well as drainages tributary to San Francisco Bay, where gravelly substrate and shaded riparian habitat occurs.	Low. No suitable or potentially suitable freshwater habitat would be present within any of the HEU sites.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC/ST/--	Open water estuaries, can be found in both saltwater and freshwater in the San Francisco Bay.	Absent. No suitable or potentially suitable freshwater habitat would be present within any of the HEU sites.
Reptiles			
Western pond turtle <i>Emys marmorata</i>	--/CSC/--	Ponds, streams with deep pools, drainages and associated uplands for egg laying.	Moderate. Not expected in the HEU planning area due to the intensity of urbanization. May occur in Steven's Creek where suitable basking sites (sandy banks and rocks) are present; however, limited habitat at project sites.
Amphibians			
California red-legged frog <i>Rana draytonii</i>	FT/CSC/--	Ponds, streams, drainages and associated uplands; requires areas of deep, still, and/or slow-moving water for breeding.	Low. Known to occur in upper reaches of Permanente Creek, but no habitat on urbanized project sites. Steven's and Permanente creeks provide limited habitat.
Birds			
Burrowing owl <i>Athene cunicularia</i>	CSC	Open, dry grasslands that contain abundant ground squirrel burrows.	Moderate. Known to occur at Shoreline Regional Park and Moffett Airfield.
California black rail <i>Laterallus jamaicensis coturniculus</i>	FT/CFP	Salt marshes bordering larger bays, also found in brackish and freshwater marshes.	Absent. No habitat in planning area. Habitat present at Shoreline Regional Park, Charleston Slough, and Palo Alto Baylands, approximately 1 mile northwest of Project.
California least tern <i>Sternula antillarum browni</i>	FE/SE/FP	Sandy beaches, alkali flats, hard-pan surfaces (salt ponds).	Absent. No habitat in planning area. Known to forage in Charleston Slough and salt ponds north of Moffett Federal Airfield for post-breeding foraging and dispersal.
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	FE/SE/FP	Tidal salt marshes with sloughs and substantial cordgrass (<i>Spartina</i> sp.) cover.	Absent. No habitat in planning area. Known to occur at mouth of Charleston Slough and in Mountain View Marsh; may also occur in lower, tidal portions of Steven's Creek.

**TABLE 4.3-1 (CONTINUED)
 SPECIAL-STATUS SPECIES POTENTIAL TO OCCUR IN THE HEU STUDY AREA**

Common Name Scientific Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence
Alameda song sparrow <i>Melospiza melodia pusillula</i>	CSC	Tidal salt marshes dominated by pickleweed; nests primarily in pickleweed and marsh gumplant.	Absent. No habitat in planning area. Occurs near tidal marshlands at Charleston Slough and Permanente Creek/Mountain View Slough, and along salt pond levees.
Northern harrier <i>Circus hudsonius</i>	CSC	Nests in wet meadows and marshes, forages over open grasslands and agricultural fields.	Low. No habitat within planning area. Known to occur at Charleston Slough and along margins of salt ponds.
Saltmarsh common yellowthroat <i>Sorex vagrans halicoetes</i>	CSC	Salt, brackish, and freshwater marshes; and riparian woodlands; nests on or near ground in low vegetation.	Absent. No habitat in planning area. Known to occur in marshes adjacent to Charleston Slough and within Coast Casey Forebay, likely occurs in other brackish and freshwater habitats along Permanente and Stevens Creek.
Western snowy plover <i>Charadrius nivosus nivosus</i>	FT/ CSC	Sandy beaches, salt ponds, and salt pond levees.	Absent. No habitat within planning area, Habitat on salt pond levees north of Shoreline Regional Park and Moffett Federal Airfield.
White-tailed kite <i>Elanus leucurus</i>	FP	Open grasslands, meadows, or marshes; require dense-topped trees or shrubs for nesting and perching.	Present. Nests on Shorebird Way within the North Bayshore Precise Plan area in 2021/2022. May nest and forage at Shoreline Regional Park, north of the planning area.
Mammals			
Pallid bat <i>Antrozous pallidus</i>	CSC/WBWG: High	A variety of open arid habitats (e.g., chaparral, open woodland, deserts); primary roost sites include bridges, old buildings, and in tree hollows and/or bark; sometimes roost in caves and rock crevices.	Moderate. May occasionally forage over open habitats within Project (e.g., grasslands, tidal marsh), but no known active roost sites in vicinity.
Western red bat <i>Lasiurus blossevillei</i>	CSC/WBWG: High	Habitats include forests and woodlands from sea level up through mixed conifer forests. Solitary rooster in tree foliage. May hibernate in leaf litter.	Moderate. Suitable roosting habitat present in oak woodland. No CNDDB occurrences from the study area.
Hoary bat <i>Lasiurus cinereus</i>	--/WBWG: Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for foraging. Roosts in dense foliage of medium to large trees. Feeds primarily on moths; requires water.	Moderate. Lack of open habitat leaves only marginally suitable roosting habitat in the project study area. Not identified from area since 1894.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSC/WBWG: High	May use buildings, bridges, rock crevices, and hollow trees as roost sites.	Moderate. Suitable roosting habitat present in oak woodland.
Yuma myotis <i>Myotis yumanensis</i>	--/WBWG: Low	Optimal habitats are open forests and woodland with sources of water over which to feed. Roost in buildings, under bridges, and in tree crevices, caves and mines.	Moderate. Suitable roosting habitat present in tree crevices bridge joints in riparian woodland and oak woodland/grassland. No CNDDB occurrences from the study area.

**TABLE 4.3-1 (CONTINUED)
SPECIAL-STATUS SPECIES POTENTIAL TO OCCUR IN THE HEU STUDY AREA**

Common Name Scientific Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/SE/CFP	Tidal salt marshes of San Francisco Bay and its tributaries. Requires tall, dense pickleweed for cover.	Absent. No habitat in planning area. Occurs in tidal marshes north of Moffett Federal Airfield and in Stevens Creek Marsh; may occur in other tidal marsh habitats in northern portion of Project.
Salt marsh wandering shrew <i>Sorex vagrans halicoetes</i>	CSC	Tidal marshes with abundant driftwood and other debris (for shelter and foraging).	Absent. No habitat in planning area. Habitat occurs in tidal marsh habitats within and adjacent to Shoreline Regional Park.
Plants			
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>Congdonii</i>	1B.1	Grasslands in alkaline or saline soils, sometimes described as heavy white clay; 1-230 meters. Blooms from May to October (sometimes into November).	Moderate. Occurs in Shoreline at Mountain View Regional Park immediately north of the North Bayshore Precise Plan area, and could occur in ruderal grassland areas, particularly along the northern edge of the Precise Plan area. Not expected elsewhere in the planning area.

KEY:

Federal: (USFWS)

FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FC = Candidate for listing by the Federal Government

State: (CDFW)

SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SR = Listed as Rare by the State of California (plants only)
SC = Candidate for listing by the State of California
CSC = California Species of Special Concern
FP = CDFW Fully Protected Species
* = CDFW protects nesting colonies
WL = Species on the CDFW Watch List

CRPR: (California Rare Plant Rank)

Rank 1A = Plants presumed extinct in California
Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
Rank 2 = Plants rare, threatened, or endangered in California but more common elsewhere
Rank 3 = Need more information
Rank 4 = Limited distribution – a watch list
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California
-- = No Listing

SOURCES: CDFW, 2022; CNPS, 2022; USFWS, 2022; City of Mountain View, 2021

Based on this analysis and available habitat in the HEU study area, and review of identified species in the North Bayshore Precise Plan, which is south of sensitive habitats at Shoreline Regional Park, a limited number of special-status species were identified with at least a moderate potential to occur in portions of the HEU project that includes western pond turtle, northern harrier (*Circus hudsonius*), and several special-status bats. Due to the general absence of salt marsh habitat within the planning area, the salt marsh-dependent species identified in CDFW's scoping letter are not expected within the HEU planning area and are not discussed further. The burrowing owl has potential to occur within the North Bayshore Precise Plan area, specifically in an area where a Steven's Creek would be bridged. In Shoreline Park immediately north of the Precise Plan area, the City supports an ongoing burrowing owl monitoring and management program (City of Mountain View, 2017). A rookery (or nesting areas) of great egrets (*Ardea alba*), snowy egrets (*Egretta thula*), and black-crowned night-herons (*Nycticorax nycticorax*)

exists along Shorebird Way. This rookery is regionally significant as one of the largest egret colonies in the South Bay (City of Mountain View, 2017).

Critical Habitat

USFWS can designate critical habitat for species that have been listed as threatened or endangered. Critical habitat is defined in FESA Section 3(5)(A) as those lands (or waters) within a listed species' current range that contain the physical or biological features that are considered essential to its conservation. There is no critical habitat within the HEU planning area.

Sensitive Natural Communities

Sensitive natural communities are designated by various resource agencies such as CDFW, or in local policies and regulations; are generally considered to have important functions or values for wildlife and/or recognized as declining in extent or distribution; and are considered threatened enough to warrant some level of protection. Two sensitive natural communities were identified within the city limits: coastal salt marsh and oak woodland. The HEU study area does not include coastal salt marsh. A limited portion of the HEU includes oak woodlands, which are primarily associated with stream corridors and riparian habitat in the City of Mountain View. The Project would have limited elements within woodlands or riparian habitat associated with stream corridors.

Wildlife Corridors

Both the shoreline and open waters of the Bay, as well as project area creeks are potential wildlife corridors. No portion of the HEU study area is within the shoreline band or open waters of the Bay; however, Steven Creek and Permanente Creek traverse the HEU study area and is considered a wildlife corridor.

4.3.3 Regulatory Setting

Federal

The FESA, Migratory Bird Treaty Act (MBTA), and Magnuson-Stevens Fishery Conservation and Management Act are the primary federal planning, treatment, and review mechanisms for biological resources in the study area. Each is summarized below.

Endangered Species Act

USFWS and the National Marine Fisheries Service (NMFS) are the designated federal agencies responsible for administering the FESA. The FESA defines species as “endangered” and “threatened” and provides regulatory protection for any species thus designated. FESA Section 9 prohibits the “take” of species listed by USFWS as threatened or endangered. As defined in the FESA, taking means “... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.” Recognizing that take cannot always be avoided, FESA Section 10(a) includes provisions for takings that are incidental to, but not the purpose of, otherwise lawful activities.

FESA Section 7(a)(2) requires all federal agencies, including USFWS, to evaluate projects authorized, funded, or carried out by federal agencies with respect to any species proposed for listing or already listed as endangered or threatened and the species' critical habitat, if any is proposed or designated. Federal agencies must undertake programs for the conservation of endangered and threatened species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined in the FESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding." No federally listed species are expected in the study area.

Migratory Bird Treaty Act

The MBTA is the domestic law that affirms and implements a commitment by the United States to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. Unless and except as permitted by regulations, the MBTA makes it unlawful at any time, by any means, or in any manner to intentionally pursue, hunt, take, capture, or kill migratory birds anywhere in the United States. The law also applies to the intentional disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season.

Clean Water Act Section 404

CWA Section 404, which is administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into "waters of the United States." USACE has established a series of nationwide permits that authorize certain activities in waters of the United States, provided that the proposed activity can demonstrate compliance with standard conditions. Projects that result in relatively minor impacts on waters of the United States can normally be conducted under one of the nationwide permits, if consistent with the standard permit conditions. Use of any nationwide permit is contingent on compliance with FESA Section 7. In the project area, Stevens Creek, Permanente Creek, and Adobe Creek qualify as waters of the United States.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Act of 1976 (U.S. Code Title 16, Sections 1801–1884 [16 USC 1804–1884]), as amended in 1996 and reauthorized in 2007, is intended to protect fisheries resources and fishing activities within 200 miles of shore. Conservation and management of U.S. fisheries, development of domestic fisheries, and phasing out of foreign fishing activities are the main objectives of the Magnuson-Stevens Act. The Magnuson-Stevens Act provided NMFS with legislative authority to regulate U.S. fisheries in the area between 3 and 200 miles offshore and established eight regional fishery management councils that manage the harvest of the fish and shellfish resources in these waters.

The Magnuson-Stevens Act defines essential fish habitat (EFH) as those waters and substrate that support fish spawning, breeding, feeding, or maturation. The Magnuson-Stevens Act requires that NMFS, the regional fishery management councils, and federal agencies taking an action that may

affect managed fish species covered under the Magnuson-Stevens Act identify EFH and protect important marine and anadromous fish habitat.

The regional fishery management councils, with assistance from NMFS, are required to develop and implement Fishery Management Plans. These plans delineate EFH and management goals for all managed fish species, including some fish species that are not protected under the Magnuson-Stevens Act. Federal agency actions that fund, permit, or carry out activities that may adversely affect EFH are required under Magnuson-Stevens Act Section 305(b), in conjunction with required Section 7 consultation under FESA, to consult with NMFS regarding potential adverse effects of their actions on EFH and to respond in writing to NMFS's recommendations.

Salmon EFH under the Pacific Coast Salmon Fishery Management Plan includes portions of lower Permanente and Stevens creeks to the extreme high tide line.³ This area is designed to protect habitat for commercially important salmonid species. Chinook salmon (*Oncorhynchus tshawytscha*) is the only one of these species that may be seasonally present in the study area, although historically Coho salmon (*O. kisutch*) were common in San Francisco Bay.

State

In addition to CEQA, the primary state planning, treatment, and review mechanisms for biological resources in the study area are the CESA, CFGC Sections 1600–1603 and 3503, 3503.5, and 3511, and the National Pollutant Discharge Elimination System (NPDES) General Permit. Each is summarized below.

Endangered Species Act

The CESA closely parallels the conditions of the FESA; however, it is administered by CDFW. CESA prohibits the take of plant and animal species that the California Fish and Game Commission has designated as either threatened or endangered in California. “Take” in the context of this regulation means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill a listed species (CFGC section 86). The take prohibitions also apply to candidates for listing under CESA. However, section 2081 of the act allows the department to issue permits for the minor and incidental take of species by an individual or permitted activity listed under the act. Unlike FESA, species that are candidates for state listing are granted the same protections as listed species under CESA.

In accordance with the requirements of CESA, an agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the study area. The agency also must determine whether the project could have a potentially significant impact on such species. In addition, the department encourages informal consultation on any project that could affect a candidate species. No state listed species are expected in the study area.

³ Pacific Fishery Management Council, *Pacific Coast Salmon Fishery Management Plan: for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California as Revised through Amendment 19*, effective March 2016. Available at <https://www.pcouncil.org/documents/2016/03/salmon-fmp-through-amendment-19.pdf/>.

California Fish and Game Code Sections 1600–1603

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports fish or wildlife resources are subject to the regulatory authority of CDFW under CFGC Sections 1600–1603. Under the CFGC, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or have supported riparian vegetation. Specifically, CFGC Section 1603 governs private-party individuals, and CFGC Section 1601 governs public projects.

CDFW jurisdiction in altered or artificial waterways is based on the value of those waterways to fish and wildlife. CDFW must be contacted by the public or private party for a streambed alteration agreement for any project that might substantially affect a streambed or wetland. CDFW has maintained a “no net loss” policy regarding potential impacts and has required replacement of lost habitats.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City’s physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. Goals, policies, actions in the 2030 General Plan related to biological resources include:

Goal LUD 10: High-quality, sustainable and healthful building design and development.

Policy LUD 10.2: Low impact development. Encourage development to minimize or avoid disturbing natural resources and ecologically significant features.

Goal LUD-16: A diverse area of complementary land uses and open space resources.

Policy LUD 16.1: Protected open space. Protect and enhance open space and habitat in the North Bayshore area.

Goal LUD 10: High-quality, sustainable and healthful building design and development.

Policy LUD 10.2: Low impact development. Encourage development to minimize or avoid disturbing natural resources and ecologically significant features.

Goal LUD-16: A diverse area of complementary land uses and open space resources.

Policy LUD 16.1: Protected open space. Protect and enhance open space and habitat in the North Bayshore area.

Goal INC-5: Effective and comprehensive programs utilizing water use efficiency, water conservation and alternative water supplies to reduce per capita potable water use.

Policy INC 5.5 Landscape efficiency. Promote water-efficient landscaping including drought- tolerant and native plants, along with efficient irrigation techniques.

Goal INC-8: An effective and innovative stormwater drainage system that protects properties from flooding and minimizes adverse environmental impacts from stormwater runoff.

Policy 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.

Policy INC 8.5: Site-specific stormwater treatment. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC 8.6: Green streets. Seek opportunities to develop green streets and sustainable streetscapes that minimize stormwater runoff, using techniques such as on-street bio-swales, bio-retention, permeable pavement or other innovative approaches.

Policy INC 8.7: Stormwater quality. Improve the water quality of stormwater and reduce flow quantities.

Goal INC-16: Rich and biologically diverse ecological resources which are protected and enhanced.

Policy INC 16.1: Natural areas. Work with regional agencies to protect and enhance natural areas.

Policy INC 16.2: Shoreline at Mountain View. Manage Shoreline at Mountain View Regional Park to balance the needs of recreational, open space, habitat, commercial and other uses.

Policy INC 16.3: Habitat. Protect and enhance nesting, foraging and other habitat for special- status species and other wildlife.

Policy INC 16.4: Invasive species. Contain and reduce the amount of invasive species.

Policy INC 16.5: Wetland habitat. Collaborate with and support regional efforts to restore and protect wetlands, creeks, tidal marshes and open-water habitats adjacent to San Francisco Bay.

Policy INC 16.6: Built environment habitat. Integrate biological resources, such as green roofs and native landscaping, into the built environment.

Goal INC-19: Effective and ecologically sensitive programs to control invasive species and plants.

Policy INC 19.1: Municipal integrated pest management. Control and prevent invasive weeds and pests using integrated pest management on all City property, including the following principles:

- A focus on control of pests at established acceptable levels, instead of eradication.
- Preventive cultivation practices appropriate for local conditions.
- Monitoring.

- Mechanical controls such as hand-picking, barriers, traps and disruption.
- Biological controls such as beneficial insects or biological insecticides.
- Chemical controls only as required or during targeted times during a pest’s life cycle

Policy INC 19.2: Herbicides and pesticides. Discourage the use of herbicides and pesticides on City property.

Policy INC 19.3: Citywide integrated pest management. Encourage and educate residents and businesses to implement integrated pest management principles and reduce the use of pesticides and herbicides.

Goal POS-3: Open space areas with natural characteristics that are protected and sustained.

Policy POS-3.1: Collaboration on sea-level rise impacts. Collaborate with regional, state and federal agencies to address the effects of potential rises in sea levels through.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The 2017 North Bayshore Precise Plan Subsequent DEIR, as adopted (City of Mountain View, 2017) identified potential impacts to biological resources, including impacts to burrowing owl and the heron rookery at Shoreline Way, that could occur due to indirect impacts related to recreation at Shoreline Park. Specifically, the analysis found that indirect impacts could occur to burrowing owls and an egret rookery in Shoreline Park due to an increased presence of people, pets (dogs and cats), and children related to residential development. Trash generated by increased use was also deemed an attractant to nuisance species (e.g., American crow and Norway rat) that could predate upon sensitive avian species. In response, the SEIR amended the Precise Plan standards and guidelines to protect and enhance biological resources. Such measures included the development of a burrowing owl Habitat Overlay Zone and an egret rookery Habitat Overlay Zone, and development measures intended to minimize the potential for impacts to burrowing owls on the northern edge of the planning area and in Shoreline at Mountain Regional View Park. Standard conditions relating to biological resources are summarized below.

Bird-Strike Management Plan

A bird-strike management plan, which provides project design features to reduce bird strikes, and a bird-strike monitoring plan postconstruction shall be submitted as part of the building permit submittal with recommended provisions included in the building permit plans.

Landscaping

Detailed landscape plans encompassing on- and off-site plantable areas out to the street curb must be included in building permit drawings. Minimum plant sizes are flats or one-gallon containers for ground cover, five-gallon for shrubs, and 24” box for trees. The drawings must be approved by the Zoning Administrator prior to building permit issuance and implemented prior to occupancy. All plans should be prepared by a licensed Landscape Architect and should comply with the City’s Landscape Guidelines, including the Water Conservation in Landscaping Regulations (forms are available online at

www.mountainview.gov/planningforms). Additional landscaping materials or modifications may be required by the Planning Division at final inspection to ensure adequate planting coverage and/or screening.

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.

Tree Removals

Permits to remove, relocate, or otherwise alter Heritage trees cannot be implemented until a project building permit for new construction is secured and the project is pursued.

Replacement Trees

The applicant shall offset the loss of each Heritage/street tree with replacement trees, as determined by the Planning Division. Each replacement tree shall be no smaller than a 24" box and shall be noted on the landscape plan as Heritage or street replacement trees.

Street Tree Protections

All designated City street trees 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 arborist's 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, 6' 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.

Irrevocable Damage to Heritage Trees

In the event one or more of the preserved Heritage tree(s) are not maintained and irrevocable damage or death of the tree(s) has occurred due to construction activity, a stop work order will be issued on the subject property and no construction activity shall occur for two (2) working days per damaged tree. The applicant will also be subject to a penalty fee at twice the tree valuation prior to damage; this fee applies to each Heritage tree damaged. No construction activity can resume until the penalty fee(s) have been paid to the City.

Tree Relocation(s)

Tree(s) numbered in the arborist report prepared shall be relocated to another location on-site as identified in the approved site and landscape plans.

Off-Site Tree Mitigation

There is no suitable on-site location for replacement trees. Therefore, the applicant shall either pay a fee or donate box trees to the City or other public agency to be used elsewhere in the community. The fee for replacement of a tree or trees shall be, at a minimum, based on the cost of a 24" box tree of the same species, delivered and installed.

Tree Replacement Fee

In exchange for site constraints and/or the limited ability to plant new trees on-site, the applicant shall offset the loss of Heritage/street tree(s) with a replacement fee made payable to the City of Mountain View, based on the adopted fee schedule. The fee must be paid prior to building permit issuance.

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 will 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' for active nests—with particular emphasis on nests of migratory birds—if construction (including site preparation) will begin during the bird nesting season, from February 1 through August 31. If active nests are observed on either the project site or the surrounding area, the applicant, in coordination with the appropriate City staff, shall establish no-disturbance buffer zones around the nests, with the size to be determined in consultation with the California Department of Fish and Wildlife

(usually 100' for perching birds and 300' for raptors). The no-disturbance buffer will 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 will be necessary to avoid impacts on active bird nests that may be present.

Burrowing Owl Habitat Area

This project is located in the habitat area of burrowing owls, a protected Special Status species under the Endangered Species Act. Any construction activity in this area shall be performed carefully and with attention to any ground disturbances, exterior lighting, and operations of mechanical or construction equipment which may impact the species. During construction activity, if a burrowing owl is present within 250' of the site, then no disturbances or construction activity may occur that would cause the owl to abandon their burrow or nest. Additionally, the California Department of Fish and Wildlife (CDFW) must be contacted immediately and a safety plan will need to be developed and approved by CDFW to determine the impacts the project may have on the owl(s). Construction activity must cease during this period.

4.3.4 Significance Criteria

The thresholds used to determine the significance of impacts related to Biological Resources are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

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

Approach to Analysis

This impact analysis is based on the resources, references, and data collection methods identified in Section 4.3.1. The analysis addresses potential direct and indirect impacts from construction or

operation of the residential projects that could be constructed if the HEU is implemented, defined as follows:

- *Direct impacts* are those that could occur at the same time and place as project implementation, such as the removal of habitat as result of ground disturbance.
- *Indirect impacts* are those that could occur either at a later time or at a distance from the project areas, but that are reasonably foreseeable, such as the loss of an aquatic species as a result of upstream effects on water quality or quantity.

Direct and indirect impacts on biological resource may vary in duration; they may be temporary, short term, or long term.

The analysis considers the potential impacts of the HEU's implementation and the development of multi-family housing on suitable habitat, special-status species, sensitive natural communities, wetlands, and wildlife corridors, using the significance criteria listed above. When appropriate, standard conditions of approval adopted by the City and presented in Section 4.3, *Regulatory Setting*, have been applied to reduce potential impacts. For impacts that remain significant following the application of standard conditions of approval, mitigation measures are identified, as necessary, to reduce impacts to less-than-significant levels.

Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- ***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.*** Due to the nature of the Project and its physical setting, the Project would not result in impacts related to Criterion b) (effects on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations).
- ***State or federally protected wetlands.*** The Project would not result in impacts related to Criterion c) (a substantial adverse effect on State or federally protected wetlands) listed above. The Project area is urbanized, and no wetlands, streams, or other aquatic features are present within the planning footprint. Thus, implementation of the Project would not have an adverse effect on State or federally protected wetlands.
- ***Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*** The Project would not result in impacts related to Criterion f) (conflict with an adopted local, regional, or State habitat conservation plan) listed above. The Project area is not located in the SCV Habitat Plan area and does not provide suitable habitat for the species of concern identified in the SCV Habitat Plan (County of Santa Clara et al., 2012; Appendix E). Thus, no impact would occur.

4.3.5 Impacts of the Project

Impact BIO-1: Implementation of the HEU would 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. (*Less than Significant with Mitigation*)

Special-Status Plants

The proposed project would primarily occur in urbanized areas where special-status plant species are not expected to occur. The Project area is largely developed and its undeveloped surfaces are either landscaped or highly disturbed. Even so, the North Bayshore Precise Plan concluded that based on the proximity of the Precise Plan area to known occurrences of Congdon's tarplant in Shoreline at Mountain View Regional Park immediately north of the Precise Plan area and the ability to grow in disturbed habitats, potentially suitable habitat for Congdon's tarplant could exist within the North Bayshore Precise Plan area, particularly along the northern edge of the Precise Plan area. With the adherence to Landscape Design guidelines of the North Bayshore Precise Plan, special status plants are unlikely to occur in the Precise Plan area. Accordingly, adoption of the great HEU would not result in a significant impact to special-status plant species [Less than Significant Impact].

Special-Status Wildlife Species

Wildlife species considered special-status and analyzed in this EIR that have a moderate potential to occur *and* to be exposed to impacts resulting from development of the Project are as follows (see Table 4.3-1 for the full list of species considered):

Special-Status and Otherwise Protected Species

- Breeding birds and their nests protected under the MBTA and California Fish and Game Code
- Pallid bat
- Townsend's big-eared bat
- Hoary bat
- Western red bat
- Yuma myotis

Several special-status wildlife species were identified that may occur within portions of the HEU planning area, but for which no impacts were identified. These include western pond turtle, Central California Coast steelhead, which could occur in riparian and aquatic and habitats that will not be affected by the proposed project. In addition, the absence of coastal salt marsh, tidal habitats, and salt ponds from the HEU planning area eliminates those species associated with salt marsh habitats from further consideration.

Impacts on Special-Status and Nesting Birds

Migratory and resident birds that breed locally in Mountain View have the potential to nest, roost, and forage in tree and shrub vegetation throughout the planning area. Special-status and migratory birds that breed locally could nest in the mature trees and landscaped vegetation that is prevalent throughout the Project area during breeding bird season, cautiously interpreted as the period between February 1 and August 31 by CDFW. Construction activities, especially those that involve heavy machinery, could adversely affect birds attempting to nest on or nearby the Project area directly through such activities as tree and vegetation removal, and indirectly through noise disturbance associated with new construction. Sensitive avian nesting areas within the North Bayshore Precise Plan area include burrowing owl habitat at Shoreline Park, and an egret rookery of great egrets, snowy egrets, and black-crowned night-herons on Shorebird Way, as described in the North Bayshore Precise Plan. The loss of an active bird nest that is attributable to Project activities would be considered a significant impact under CEQA, if that nest was occupied by a bird species protected by the MBTA or other regulations. Disruption of nesting migratory or native birds is not permitted under the federal MBTA or the California Fish and Game Code, as it could constitute unauthorized take. However, the City would apply the City Standard Condition of Approval (Preconstruction Nesting Bird Survey) concerning nesting birds, which includes restricting certain construction activities during breeding bird season, requiring preconstruction surveys, and implementing avoidance measures if active nests are located. Adherence to the measures outlined in the City's Standard Conditions of Approval would reduce impacts to special-status and nesting birds to a less than significant level.

Impacts from Bird Collisions from HEU Buildings

The project area is located within the Pacific Flyway with portions of the planning area near San Francisco Bay. Although specific avian migratory corridors near the project area are unknown, it can be assumed that numerous birds pass overhead or in the project vicinity during their spring and fall migrations. While the precise height and composition of new construction and building renovation projects is not available, the proposed project is likely to increase the amount of glass and the height of structures in the built environment. Typically, as building size increases, so does the amount of glass, making larger buildings more of a collision threat to flying birds. To minimize adverse effects on native and migratory birds colliding with new and renovated structures where such hazards exist, some of the City's existing precise plans have adopted Bird Safe Design measures to promote bird safety. Where such measures are deemed necessary by the City, they have been identified in precise plans and conditions of approval are identified. For example, all new construction and major renovations in the North Bayshore Precise Plan, the planning area closest to San Francisco Bay, must incorporate design measures to promote bird safety. Bird Safe Design measures are intended to help diminish the likelihood of building collision fatalities through façade treatments and light pollution reduction. These measures apply to both residential and non-residential land uses, except where specified.

Because the construction of new multi-story buildings within the Project area could represent potential collision hazards to birds in the Project area, specific planning standards would be applied to reduce hazards, as appropriate for each precise plan area. The City Standard Condition of Approval (Bird-Strike Management Plan) would be applied to all new multistory construction and building renovation projects. Adherence to the measures outlined in the City's Standard

Conditions of Approval (Bird-Strike Management Plan) would reduce impacts related to bird collisions to a less than significant level.

Impacts to Special-Status Bats

The CNDDDB documents occurrences of several special status bats, including pallid bat, Townsend's big-eared bat, and hoary bat, in urban area within 5 miles of the Project area. Additionally, Yuma myotis and western red bat also has the potential to occur on the Project area. Suitable roosting habitat for these bats includes tree foliage, underneath the exfoliating bark of trees, and in tree cavities. Bats could also be present seasonally in tree foliage, in tree cavities, or under the loose, peeling bark of trees at or in proximity to the Project area.

The Project has the potential to adversely affect special-status bats which may roost in and around the Project area through the removal of trees during construction. Direct mortality of special-status bats would be a significant impact. Potential Project-related impacts to special-status bats would be minimized to a less-than-significant level with the implementation of **Mitigation Measure BIO-1**, which would require preconstruction survey for special-status bats and other avoidance measures during construction. With incorporation of this mitigation measure, construction-related impacts to special-status bats roosting in and around the Project area would be minimized and the impact would be **less than significant**.

Mitigation Measure BIO-1: Special-Status Bat Protection Measures.

In coordination with the City, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the subsequent project sites to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:

- Removal of trees shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 16 – August 14) and outside the months of winter torpor (approximately October 16 – February 28), to the extent feasible.
- If removal of trees during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and building removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by a qualified biologist. A 100-foot no-disturbance buffer is a typical protective buffer distance; however, this may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation) as well as the type of construction activity which would occur around the roost site.
- The qualified biologist shall be present during tree removal if potential bat roosting habitat or active bat roosts are present. Trees with active roosts shall only be removed when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F.

- Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process:
 - On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.
 - On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe).

Significance After Mitigation: Implementation of Mitigation Measure BIO-1 would reduce impacts to roosting bats to a less than significant level.

Impact BIO-2: Implementation of the HEU 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. (*Less than Significant*)

The Project would not result in impacts related to Criterion d) (effects on the movement of any native resident or migratory fish or wildlife species, on wildlife corridors, or the use of native wildlife nursery sites). Even with the presence of Permanente Creek and Stevens Creek in the planning area, the project occurs in an area where habitat has been highly fragmented by intensive residential and commercial development and fragmented by U.S. 101. Due to the lack of suitable habitat, small size, lack of connectivity with other habitat areas, and location within a developed area, developed portions of the HEU planning area do not serve as a regional wildlife movement or dispersal corridor. Thus, no impact would occur.

Mitigation: None required.

Impact BIO-3: Implementation of the HEU would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (*Less than Significant*)

As discussed above under *Local Regulations and Policies*, the City of Mountain View City Code contains protections for heritage trees and street trees throughout the City. The Mountain View City Code defines a "heritage tree" to be any tree 48-inch circumference (15.3-inch diameter) at 54-inches above grade, plus any oak, redwood, or cedar that has a 12-inch circumference (3.8-inch diameter). Street trees are defined as trees located in the public right-of-way, which is typically defined as 5 feet from the back edge of the sidewalk or 10 feet from the beginning of the curb edge. The project area contains heritage trees and street trees that would be subject to removal and replacement consistent with City standards; although it is not known how many would be removed from the site. The Project proposes to comply with the City's standard requirements to avoid impacts to protected trees under the City of Mountain View's Heritage Tree Ordinance, and then provide replacement as needed.

Permits to remove, relocate, or otherwise alter Heritage trees cannot be implemented until a building permit is secured and an individual Project is pursued. If applicable, project applicants would individually request a Heritage Tree Removal Permit, which is subject to City review and approval. The permit would include conditions for protection, relocation, and replacement, in accordance with City standards. As long as tree removal is consistent with all permitting conditions, Project removal of Heritage trees would not conflict with local ordinances or policies. The City's Standard Conditions of Approval include the following measures related to protected trees: Landscaping, Arborist Report, Arborist Inspections, Monthly Arborist Inspections, Tree Removals, Replacement Trees, Street Tree Protections, Tree Protection Measures, Irrevocable Damage to Heritage Trees, Tree Relocation(s), Off-Site Tree Mitigation, and Tree Replacement Fee.

With approval of the Heritage Tree Removal permit and implementation of permit conditions, the Project would not conflict with any local policies or ordinances protecting biological resources, including the City's Heritage Tree protection ordinance. No other local policies or ordinances related to biological resources would conflict with the Project. Therefore, the impact would be less than significant.

Mitigation: None required.

4.3.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to biological resources could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects would cause the project to have a cumulatively considerable impact on special-status species, wetlands or other waters of the U.S., or other biological resources protected by federal, state, or local regulations or policies (based on the significance criteria and thresholds presented earlier). This analysis considers whether the incremental contribution of the HEU's implementation to this cumulative impact would be considerable. Both conditions must apply for a project's cumulative effects to be significant.

The geographic scope of potential cumulative impacts on biological resources encompasses the HEU housing inventory sites and biologically linked areas in the City of Mountain View and greater San Francisco Bay. Historic development in the region has already caused substantial adverse cumulative changes to biological resources in the HEU study area and the City of Mountain View generally. This includes the engineering of portions of the Permanente Creek watershed to allow urban development over and around these waterways, and the loss of the riparian corridors and floodplains to urban encroachment.

The Mountain View Housing Element Update analyzed cumulative impacts at a high level without specific identification of cumulative projects or housing unit projections. The HEU found that the potential impacts of the proposed project on biological resources would be site-

specific and the overall cumulative effect would be dependent on the degree to which native vegetation (e.g., native grasslands, oak woodlands, riparian woodland), populations of special-status plant or animal species, and wetland features occur, and are protected on a particular development site. Importantly, the refinement of the HEU housing site inventory has resulted in lower potential for housing development to occur in natural habitats. The HEU housing inventory sites are concentrated in urbanized areas and no parcels are proposed within natural habitats such as coastal salt marsh, salt ponds, tidal marsh, oak woodland or grassland. Therefore, potential cumulative impacts to biological resources are generally low within HEU planning area.

Impact BIO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on Biological Resources. (*Less than Significant with Mitigation*)

As discussed above, the Project would have no impact to riparian habitats or other sensitive natural communities, State or federally protected wetlands, wildlife corridors, or provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; therefore, would not contribute to a significant impact related to these topics.

Impacts on Special-Status and Nesting Birds, and Roosting Bats

Construction within the HEU housing inventory sites could result in direct impacts on nesting birds due to tree removal or trimming, and similar impacts to special-status roosting bats. Cumulative projects could potentially indirectly impact nesting birds and roosting bats due to clearing and grubbing, and increased noise, vibration and/or visual disturbance during construction, which could cause nest/roost failure or abandonment, or disrupt sheltering, breeding, and foraging in adjacent habitat, such as Permanente Creek or Stevens Creek, by nesting birds. These cumulative projects would be required to comply with applicable regulatory requirements protecting biological resources, the City of Mountain View's Tree Protection Ordinance, and project-specific mitigation measures (where applicable) similar to those of the HEU.

With the implementation of City Standard Conditions of Approval, the HEU, in combination with cumulative projects, would not result in a significant cumulative impacts to nesting birds during construction. With the application of City of Mountain View Standard Condition of Approval (Preconstruction Nesting Bird Survey), implementation of the HEU would not result in a considerable contribution to cumulative impacts; therefore, the cumulative impacts to nesting birds would be **less than significant**.

The implementation of Mitigation Measure BIO-1 would avoid and minimize impacts to roosting bats, thereby reducing the magnitude of this impact at the project-level to less than significant. The Project's contribution would not be considered cumulatively considerable because the Project would, like other projects that are part of the cumulative scenario, be required to implement all feasible mitigation measures to reduce potential impacts special-status bats, including performing preconstruction surveys to identify and protect active bat roosts. Therefore, the cumulative impacts to special-status bats would be **less than significant**.

Impacts from Bird Collisions from HEU Buildings

Because the construction of new multi-story buildings on the Project site could represent potential collision hazards to birds in the Project area, specific planning standards would be applied to reduce hazards, as appropriate for each precise plan area. Where bird protection measures are deemed necessary by the City based on the identified level of collision hazard, they have been identified in precise plans, and conditions of approval are additionally identified. For example, all new construction and major renovations in the North Bayshore Precise Plan, the planning area closest to San Francisco Bay, must incorporate design measures to promote bird safety. In addition, much of the planned new housing would be infill development that is away from avian movement corridors and would not pose a threat to birds in flight.

The HEU, in combination with cumulative projects, could result in a significant cumulative impact on related to bird collisions with buildings during operations. However, with the application of City of Mountain View Standard Condition of Approval (Bird-Strike Management Plan), implementation of the HEU would not result in a considerable contribution to cumulative impacts; therefore, the cumulative impact would be **less than significant**.

Local Policies or Ordinances/Heritage Trees and Street Trees

Other reasonably foreseeable projects could result in the removal of existing trees, including heritage trees. A tree removal permit is required from the City for the removal of any heritage trees. Projects constructed in Mountain View are required to mitigate for the removal of Heritage trees, and protect any trees that remain in place from potential construction damage. The Project's contribution would not be considered cumulatively considerable because the Project would, like other projects that are part of the cumulative scenario, be required to perform tree removal consistent with all Heritage Tree permitting conditions and would not conflict with the City's Heritage Tree protection ordinance.

Summary

Overall, in combination with past, present, and reasonably foreseeable future projects within the geographic context for this analysis, the Project would not result in a cumulatively considerable contribution to a cumulative impact on biological resources.

Mitigation: Mitigation Measure BIO-1.

Significance After Mitigation: Less Than Significant.

City of Mountain View Heritage Tree Ordinance

Other reasonably foreseeable projects could result in the removal of existing trees, including Heritage trees. A tree removal permit is required from the City for the removal of any Heritage trees. Projects constructed in Mountain View are required to mitigate for the removal of Heritage trees and protect any trees that remain in place from potential construction damage. The Project's contribution would not be considered cumulatively considerable because the Project would, like other projects that are part of the cumulative scenario, be required to perform tree removal consistent with all Heritage Tree permitting conditions and would not conflict with the City's Heritage Tree protection ordinance.

Summary

Overall, in combination with past, present, and reasonably foreseeable future projects within the geographic context for this analysis, the Project would not result in a cumulatively considerable contribution to a cumulative impact on biological resources.

Mitigation: Mitigation Measure BIO-1.

Significance after Mitigation: Less than Significant.

4.3.7 Summary of Biological Resources Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact BIO-1: Implementation of the HEU would 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.	Less than Significant with Mitigation.	Mitigation Measure BIO-1: Special-Status Bat Protection Measures	Less than Significant
Impact BIO-2: Implementation of the HEU 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.	Less Than Significant	None Required	-
Impact BIO-3: Implementation of the HEU would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less Than Significant	None Required	-
Impact BIO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on Biological Resources	Less Than Significant	Mitigation Measure BIO-1: Special-Status Bat Protection Measures	Less than Significant

4.3.8 References

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California Native Plant Society (CNPS). 2022. CNPS Rare Plant Program, Online Inventory of Rare and Endangered Plants of California (online editions, v9-01 1.0). Available online: <https://www.rareplants.cnps.org/>. April 5, 2022.

City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021.

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Goals Project. 2000. *Baylands Ecosystem Species and Community Profiles: Life Histories and Environmental Requirements of Key Plants, Fish and Wildlife*. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project, ed. P. R. Olofson. Oakland, CA: San Francisco Bay Regional Water Quality Control Board.

U.S. Fish and Wildlife Service (USFWS). 2022. *Official List of Federal Endangered and Threatened Species that Occur in or May Be Affected by the Project*.

4.4 Cultural Resources and Tribal Cultural Resources

4.4.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on cultural resources, including historic architectural resources, historic-era and pre-contact archaeological resources, and human remains as well as tribal cultural resources. This section first includes a description of the existing environmental setting as it relates to cultural resources and tribal cultural resources, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on cultural resources and tribal cultural resources.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. The City received scoping comments from the Native American Heritage Commission (NAHC) which recommended, pursuant to Public Resources Code Section 21074(a) [Assembly Bill 52 (AB 52)], that the City conduct consultation with tribes that are affiliated with the City of Mountain View.

4.4.2 Environmental Setting

Pre-Contact Setting

Categorizing the pre-contact period into broad cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given time frame, thereby creating a regional chronology. This section provides a brief discussion of the pre-contact chronology for the area known now as the City of Mountain View.

Archaeologists developed individual cultural chronological sequences tailored to the archaeology and material culture of each sub-region of California. Each of these sequences is based principally on the presence of distinctive cultural traits and stratigraphic separation of deposits. Milliken et al. provide a framework for the interpretation of the San Francisco Bay Area (Milliken, 2007). The authors divided human history in California into three periods: the *Early Period*, the *Middle Period*, and the *Late Period*. In many parts of California four periods are defined; the fourth being the *Paleoindian Period* (11500–8000 B.C.), characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during the Paleoindian Period has not yet been discovered in the San Francisco Bay Area. Economic patterns, stylistic aspects, and regional phases further subdivide cultural periods into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

During the Early Period (Lower Archaic, 8000–3500 B.C.), geographic mobility continued from the Paleoindian Period and is characterized by the millingslab and handstone as well as large wide-stemmed and leaf-shaped projectile points. The first cut shell beads and the mortar and pestle are first documented in burials during the Early Period (Middle Archaic, 3500–500 B.C.), indicating the beginning of a shift to sedentism. During the Middle Period, which includes the

Lower Middle Period (Initial Upper Archaic, 500 B.C.–A.D. 430), and Upper Middle Period (Late Upper Archaic, A.D. 430–1050), geographic mobility may have continued, although groups began to establish longer term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from this period. The addition of milling tools, obsidian, and chert concave-base projectile points, as well as the occurrence of sites in a wider range of environments, suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around A.D. 430, a dramatic cultural disruption occurred as evidenced by the sudden collapse of the *Olivella* saucer bead trade network. During the Initial Late Period (Lower Emergent, A.D. 1050–1550), social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

Ethnographic Setting

A compilation of ethnohistorical, historical, and archeological data indicates that the San Francisco Bay Area was inhabited by a cultural group known as the Ohlone before the arrival of Europeans (Milliken, 1995). While traditional anthropological literature portrayed the Ohlone peoples as having a static culture, today it is better understood that many variations of culture and ideology existed within and between villages. While these static descriptions of separations between native cultures of California make it an easier task for ethnographers to describe past behaviors, this approach masks Native adaptability and self-identity. California’s Native Americans never saw themselves as members of larger cultural groups, as described by anthropologists. Instead, they saw themselves as members of specific village communities, perhaps related to others by marriage or kinship ties, but viewing the village as the primary identifier of their origins.

Levy describes the language group spoken by the Ohlone (often referred to as “Costanoan” in the literature) (Levy, 1978). This term is originally derived from a Spanish word designating the coastal peoples of Central California. Today, Costanoan is used as a linguistic term that refers to a larger language family that included distinct sociopolitical groups that spoke at least eight languages of the Penutian language group. The Ohlone once occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. The Ohlone people that occupied the San Francisco peninsula, spoke Ramaytush and the Ohlone people that occupied the Santa Clara Valley spoke Tamyen (or Tamien). Mountain View is located within the boundary zone of these two dialects of Ohlone.

Economically, the Ohlone engaged in hunting and gathering. Their territory encompassed both coastal and open valley environments that contained a wide variety of resources, including grass seeds, acorns, bulbs and tubers, bear, deer, elk, antelope, a variety of bird species, and rabbit and other small mammals. The Ohlone acknowledged private ownership of goods and songs, and village ownership of rights to land and/or natural resources; they appear to have aggressively protected their village territories, requiring monetary payment for access rights in the form of clam shell beads, and even shooting trespassers if caught.

In 1770, the Ohlone lived in approximately 50 separate and politically autonomous nations. The typical size of an Ohlone village ranged from 40 to 200 members. During the Mission Period (1770 to 1835), native populations, especially along the California coast, were brought—usually by force—to the missions by the Spanish missionaries to provide labor. The missionization caused the Ohlone people to experience cataclysmic changes in almost all areas of their life, particularly a massive decline in population caused by introduced diseases and declining birth rate, resulting in large part from colonization by the Spanish missionaries. Following the secularization of the missions by the Mexican government in the 1830s, most Native Americans gradually left the missions and established rancherias in the surrounding areas (Levy, 1978).

After European contact, Ohlone ways of life were severely disrupted by missionization, disease, and displacement. Today the Ohlone still have a strong presence in the San Francisco Bay Area and are very interested in their historic-era and pre-contact past. There are currently seven Ohlone groups listed on the Native American Heritage Commission (NAHC) contact list for the Mountain View area.

Historic Period

Spanish and Mexican Period (1776–1848)

Gaspar De Portola led a company of 64 Spanish explorers through the Santa Clara Valley in the fall of 1769 (Archives & Architecture [A&A], 2012). Juan Bautista de Anza and Pedro Font led the next expedition through the area in early 1776, leaving a substantial record of their travels. The explorers commented on the level land and good pasturage, concluding that the area would be an excellent site for settlement.

Soon after this initial phase of exploration, the Spanish established military, religious, and secular settlements in the area to solidify their influence. Military *presidios* were established at present-day San Francisco and Monterey. Franciscan missionaries established 23 missions throughout the state, including Mission Santa Clara de Asis and Mission San Jose in present-day Santa Clara County. The closest mission to present-day Mountain View, Mission Santa Clara de Asis, was established approximately 17 miles to the southeast of the City in 1777 by Spanish Lt. Jose Moraga and Fray Tomas de la Pena (Mountain View Historical Association [MVHA], 2022). Mission Santa Clara de Asis was the eighth of 21 missions established by the Franciscan order in present-day California. The route that connected them was known as El Camino Real (the Royal Road) which is roughly approximated locally by present-day El Camino Real (State Highway 82) (California Department of Parks and Recreation, Office of Historic Preservation [OHP], 2022).

The period of Spanish governance in the area ended in 1821 when Spain ceded their North American colonial outposts to the newly independent Republic of Mexico and Upper California became a province of the Republic of Mexico. Following independence, the new Mexican government secularized the missions and divided the former mission lands into large ranchos, or tracts, which were then granted to prominent, wealthy, or otherwise well-connected individuals as a reward for their services to the government. Between 1833 and 1845, 38 of these grants were made within what is now Santa Clara County (A&A, 2012). The City of Mountain View was part of the 8,800-acre Rancho Pastoria de las Borregas. This rancho was granted to Francisco Estrada

and his wife, Inez Castro in 1842 (MVHA, 2022). In 1844, 3,042 acres was granted to Lupe Ynigo, a local Native American.¹ His Rancho Posolmi later became Moffett Field (Holman & Associates, 2017). Yñigo was a Ohlone man who worked in as an alcalde at Mission Santa Clara until it was secularized (Shew, 1903).

During the 1840s, relations between the United States and Mexico became strained, with Mexico fearing American encroachment into their territories. The political situation became unstable and war between the two nations broke out in 1846. American attempts to seize control of California ensued, and within two months California was taken by the United States. Skirmishes between the two sides continued until the United States officially annexed California on February 2, 1848 (Kyle, 2002).

Late 19th Century (1849–1901)

In 1848, California became part of the United States and gold was discovered in the Sierra Nevada mountains. These two events increased the population throughout California, especially in San Francisco and San Jose. Travel on the bay and over land between the two settlements increased, and reliable transport of people and goods became of critical importance. Ports were developed and transportation improved. In 1850, the Butterfield Stage Line began coach service on El Camino Real. A stop was established on present-day Grant Road in Mountain View, around which grew a small business district (MVHA, 2022). This was followed in 1864 by the San Francisco-San Jose Railroad which was located approximately a mile northwest of the original settlement of Mountain View along the present-day Caltrain alignment. A business district grew around the new train station, eventually becoming the heart of present-day Mountain View (Kusz, 2002).

Residential Construction of the Era

Extant residential development from this period is quite limited. The 2012 General Plan EIR notes that “very few Victoriana-era houses survive in Mountain View” (LSA, 2012). Those that remain were once part of farms and ranches and were widely scattered. Many were associated with early and prominent families. “They range in style from Queen Anne Victorian, to Gothic Revival, to Italianate. They also exhibit a broad range in size, from large houses...to more modest Victorian cottages or small Folk Victorian houses” (LSA, 2012).

Early Mountain View (1902–1940)

Improvements in transportation, expansion of agriculture throughout the area, and a steady influx of settlers lead to incorporation of the City of Mountain View on November 7, 1902. The initial population of the city was 610 people with city limits defined on the north by Washington Street, on the south by El Camino Real, on the west by Pettis Avenue, and on the east roughly by Calderon Avenue (MVHA, 2022). A small increase on population followed the 1906 earthquake as people fled urban areas like San Francisco and San Jose, but generally the town retained its agricultural and semi-rural atmosphere. Fruit cultivation and processing dominated both local land use and the local economy throughout this period. Aerial photographs from the first half of

¹ His name appears in the archival records as both “Lope” and “Lupe.” Lupe is used in this document.

the 20th century show large orchards with small, concentrated areas of development along the railroad tracks and vehicular routes.

Another major influence on the development of the City from this period was the establishment of the Sunnyvale Naval Air Station in the 1933 on a portion of the former Rancho Posolmi. Construction of the base, including the massive hangars needed to house the dirigibles USS Macon and USS Akron brought jobs and people to Mountain View and the surrounding communities. The street leading to the new base (Moffett Boulevard) became lined with restaurants, bars, and entertainment venues (Kusz, 2002). Military development extended beyond the base to include new support and technology businesses such as machinists, electronics development, plastics and fabrication shops, and engineering firms of all sorts.

Residential Construction of the Era

Housing stock from this era is relatively modest in size and dominated by single-family homes in the Craftsman, or Bungalow, style (LSA, 2012). Neighborhoods constructed prior to World War II, many near downtown Mountain View, showcase this style and era of construction. They are generally single story, clad with wood (shingles or lap siding), and have prominent front porches. Also popular, during this period were various revival styles. “The revival styles in Mountain View most commonly took the form of Colonial Revival, Mission or Spanish Colonial Revival, and Tudor Revival or English Cottage style” (LSA, 2012). Houses from in these revival styles are general one- or two-stories high, constructed of wood but clad in brick, stone, or stucco.

Housing construction slowed in the 1930s as a result of the economic hardships associated with the Great Depression. Stock from this period is generally modest in scale and simple in form. Architecturally, the predominant style from this period is Minimal Traditional, a style largely devoid of ornament or complicated forms.

World War II and the Birth of Silicon Valley (1941–Present)

The advent of World War II initiated a long period of substantial growth in Mountain View and throughout Santa Clara Valley. Proximity to major existing military installations, such as Moffett Field, and the rapid construction of new military facilities around San Francisco Bay, made the entire Bay Area a major strategic asset. Thousands of soldiers shipping out to the Pacific front passed through the area and many returned at the end of the war. They joined the thousands of workers that came to work at the shipyards, airfields, and associated research and commercial facilities during the war.

Proximity to these military and associated research and commercial facilities, combined with the nearby academic facilities of Stanford University and other local institutions is credited with supporting the tremendous technological advances that followed the end of World War II. The birth of Silicon Valley has been historically linked to Fairchild Semiconductor, a pioneer in semiconductor product development (Computer History Museum [CHM], 2022). Fairchild Semiconductor was founded in Palo Alto (844 East Charleston Road, extant) (Liebson, 2018) in 1957 by eight former Shockley Semiconductor Laboratory employees (CHM, 2022). The company met with early and swift financial success, moving to a larger facility at 464 Ellis Street in Mountain View in the late 1960s (The Rusty Bucket, nd) (demolished in 1993) (Liebson, 2018)

and spurring a wave of spinoff started by ex-Fairchild Semiconductor employees as well as similar technology companies. In the 1960s alone, more than 30 startups emerged in the area. Many started in Mountain view including Amelco (founded 1961, 1300 Terra Bella Avenue) (CHM, 2022; Drummer and Robertson, 2014) and Intel (founded 1968, 365 East Middlefield Road) (CHM, 2022; Mazurek, 1998). Amelco later became a division of Teledyne Semiconductor. Competitors also set up shop in the area, including Advanced Technology Laboratories/American Standard (1961, 369 North Whisman Road, demolished) (Melgar Commercial Photographers, 1961).

Other companies started by ex-Fairchild Semiconductor employees began operations in the communities around Fairchild Semiconductor. According to the Computer History Museum (2022), they included:

- GMe (Santa Clara, 1963)
- Applied Materials Technology (Santa Clara, 1967)
- Advanced Micro Devices (AMD),(Sunnyvale, 1969)
- National Semiconductor (Santa Clara, 1967)
- KLA Tencor (San Jose, 1975)
- Apple Computer (Los Altos, 1976)
- Oracle (Santa Clara, 1977)
- U-B Networks (Santa Clara, 1979)
- VLSI (Los Gatos, 1979)

The almost immediate financial gain associated with technological advancements from these early technology companies attracted investors and spurred further innovation. The modern venture capital hotbed surrounding Silicon Valley has its roots in the early success of Fairchild Semiconductor and its spinoffs (CHM, 2022). Several individuals associated with the early technological success moved from the laboratory to the board room, forming Sequoia Capital, Kleiner Perkins Caufeld & Byers, and other venture capital firms (CHM, 2022).

By the early 1970s, Silicon Valley had a work force of 58,000. Over half of this number were employed by firms manufacturing electronic components (Lecuyer, 2001). These components were critical to a wide array of advanced industrial and military systems, bringing outsized influence of the industry on American economic politics (Lecuyer, 2001). In the larger area, many of the street names reflect this early industrial history – Fairchild Drive, National Avenue, Circuit Way, Optic Loop. More broadly, a 2014 research study traced more than 92 public Bay Area tech companies to the founders and employees of Fairchild. At that time, the market value of all of these companies was more than \$2 trillion” (CHM, 2022).

Residential Construction of the Era

Many of the temporary war housing was replaced in the post-World War II period with large suburban housing developments. These developments transformed former agricultural fields and orchards into whole neighborhoods of similarly-designed, single-family residences. The Ranch

style evolved from traditional housing forms to become a dominant residential style. These one-story, elongated plan residences are often sited near the center of the building lot, with front-facing garages and integrated landscaping. Also prominent in Mountain View is the distinctive design associated with the developer Joseph Eichler. His version of the Mid-Century Modern style features “glass walls, post-and-beam construction, and open floor plans, which are reminiscent of Frank Lloyd Wright’s buildings through their integration of indoor and outdoor spaces” (LSA, 2012). Mountain View has two Eichler developments – the Eichler/Trophy Drive area and parts of the Monta Loma area.

Previously Identified Cultural Resources

For the purposes of this section, cultural resources are defined as physical evidence or a place of past human activity, including sites, objects, landscapes, or structures of significance to a group of people traditionally associated with it. Archaeological resources can be both pre-contact and historic-era and consist of cultural resources that are on the surface or in the subsurface. Historic resources are historic-era (i.e., 45 years old or older) buildings or structures that have been determined as significant and eligible for, or listed on, the National Register of Historic Places (National Register) and/or California Register of Historical Resources (California Register).

ESA completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) on March 22, 2022 (File No. 21-1554). The review included the entire City of Mountain View. Previous surveys, studies, and site records were accessed. Records were also reviewed in the Built Environment Resources Directory (BERD) for Santa Clara County, which contains information on places of recognized historical significance including those evaluated for listing in the National Register of Historic Places, the California Register of Historical Resources, the California Inventory of Historical Resources, California Historical Landmarks, and California Points of Historical Interest (OHP, 2022). The purpose of the records search was to (1) determine whether known cultural resources have been recorded within the project vicinity; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

Identified Historic Resources

The City of Mountain View conducted a Citywide Historic Properties Survey in 2008 to identify those properties that may have potential State or National significance. At that time, 45 such properties were identified. The City of Mountain View also maintains the City of Mountain View Register of Historic Resources (local register). As of 2012, the local register was composed of 41 locally significant historic architectural resources. This inventory is currently being updated but as of publication of this document, the revised results were not available to review as they have not yet been adopted. The following provides a list of previously identified historic resources as presented in previous City documents, as well those listed on the National Register, California Register, and local register (**Table 4.4-1**).

**TABLE 4.4-1
 KNOWN HISTORIC RESOURCES**

Name of Resource	Location	Status	Date of Construction	Source
	1181 Bonita Avenue	Local Register	1930	2030 GP EIR
James Shower House	206 Bush Street	Local Register	1904	2030 GP EIR
"Willie Garliepp House"; Craftsman Bungalow	725 Calderon Avenue	Local Register	1910	2030 GP EIR
	1560 California Street	Local Register	1900	2030 GP EIR
	1610 California Street	Local Register	c.1900	2030 GP EIR
	1690 California Street	Local Register	1920	2030 GP EIR
Weilheimer Store	124 Castro Street	Local Register	1874	2030 GP EIR
Rogers Building	142-156 Castro Street	Local Register	1906	2030 GP EIR
Ames Building	169-175 Castro Street	Local Register	1903	2030 GP EIR
Farmers and Merchants Bank	201 Castro Street	Local Register	--	2030 GP EIR
Mountain View Theater	228 Castro Street	Local Register	1926	2030 GP EIR
Scarpa's Meat Market	298 Castro Street	Local Register	1908	2030 GP EIR
	251 Chiquita Avenue	Local Register	1915	2030 GP EIR
	595 Church Street	Local Register	1930	2030 GP EIR
Levin Huff House	2715 Diericx Drive	Local Register	1925	2030 GP EIR
	394 Franklin Street	Local Register	1890	2030 GP EIR
	403 Hope Street	Local Register	1915	2030 GP EIR
	425 Hope Street	Local Register	1906	2030 GP EIR
James Cochran House	1390 Latham Street	Local Register	1912	2030 GP EIR
	1655 Lloyd Way	Local Register	c.1920	2030 GP EIR
	484 Loreto Street	Local Register		2030 GP EIR
CampHouse	336 Mariposa Avenue	Local Register	1900	2030 GP EIR
	496 Mariposa Avenue	Local Register	1920	2030 GP EIR
	1855 Miramonte Avenue	Local Register	1927	2030 GP EIR
Mountain View Adobe	157 Moffett Blvd.	National Register-listed, California Register-listed	1934	NARA
	360 Oak Street	Local Register	1924	2030 GP EIR
	296 Palo Alto Avenue	Local Register	1915	2030 GP EIR
	390 Palo Alto Avenue	Local Register	1930	2030 GP EIR
	562 Pettis Avenue	Local Register	1920	2030 GP EIR
Henry A. Rengstorff House	3070 N. Shoreline Blvd. (relocated)	National Register-listed, California Register-listed	1867	NARA
	472 S. Shoreline Boulevard	Local Register	1910	2030 GP EIR
	1531 Tyler Park Way	Local Register	1925	2030 GP EIR
McPheeter's House	322 View Street	Local Register	1910	2030 GP EIR
	327 View Street	Local Register	1925	2030 GP EIR

**TABLE 4.4-1 (CONTINUED)
 KNOWN HISTORIC RESOURCES**

Name of Resource	Location	Status	Date of Construction	Source
Tank House	515 Villa Street	Local Register	1890	2030 GP EIR
Pearson House	902 Villa Street	Local Register	c.1888	2030 GP EIR
Air Base Laundry	954 Villa Street	National Register-eligible, California Register-listed	1931	City of Mountain View
Weilheimer House	938 Villa Street	National Register-eligible, California Register-listed	1905	City of Mountain View
	1043 Villa Street	Local Register	c.1904	2030 GP EIR
	1643 Villa Street	Local Register	1915	2030 GP EIR
	1645 Villa Street	Local Register	1915	2030 GP EIR
	1655 Villa Street	Local Register	1915	2030 GP EIR
	1074-76 Wright Avenue	Local Register	1875	2030 GP EIR
	680 Yosemite Avenue	Local Register	1928	2030 GP EIR

SOURCE: National Archives (NARA), 2022 Santa Clara County BERD, 2030 General Plan EIR, personal communication with City of Mountain View.

In addition to the above, the NWIC records search indicated that 118 previously recorded historic-age architectural resources are recorded within the City of Mountain View.

Identified Archaeological Resources

The NWIC records search indicated that eleven previously recorded archaeological resources are recorded within the City of Mountain View. **Table 4.4-2** describes these eleven archaeological resources.

Only one (Crittendon Mound) of the eleven resources has been formally evaluated for the National Register, and it was determined not eligible for inclusion. None of the archaeological resources have been formally evaluated for the California Register and therefore are treated as potential historical resources for the purposes of this analysis. Three of these resources (Castro-Ponce Mound, Little Castro, and Bert Gerow marking) include human remains, and it is likely that these archaeological resources would be eligible for the California Register and/or the National Register, if evaluated.

Identified Tribal Cultural Resource

Native American Consultation

In accordance with the requirements of Senate Bill 18 (SB 18) and AB 52 (Public Resources Code Section 21074(a)), City staff conducted Native American outreach and consultation efforts. On March 4, 2022, the City emailed thirteen letters to ten tribes based on prior consultation. On May 11, 2022, the City sent tribal outreach letters to eleven Native American representatives from eight tribes that were identified by the City based on a Tribal Consultation list developed by the Native American Heritage Commission. No tribes have responded to the tribal consultation efforts within 90 days and no responses have been received as of July 22, 2022, the filing date of the DEIR.

**TABLE 4.4-2
 PREVIOUSLY RECORDED ARCHAEOLOGICAL RESOURCES**

Name of Resource	Source	Description	Eligibility
Castro-Ponce Mound (P-43-000021)	NWIC	Pre-contact habitation site with burials	Not evaluated, Potential historical resource
Little Castro (P-43-000042)	NWIC	Pre-contact habitation site with burials	Not evaluated, Potential historical resource
Crittendon Mound (P-43-000043)	NWIC	Pre-contact habitation site	Determined not eligible for the National Register; Not evaluated for the California Register
Bert Gerow marking (P-43-000418)	NWIC	Pre-contact habitation site with burials	Not evaluated, Potential historic property and/or historical resource
DOT-04-SCL-101-1 (P-43-000441)	NWIC	Pre-contact habitation site	Not evaluated, Potential historic property and/or historical resource
C-161 (P-43-000635)	NWIC	Pre-contact habitation site	Not evaluated, Potential historic property and/or historical resource
Adobe/Alma (P-43-000669)	NWIC	Pre-contact habitation site	Not evaluated, Potential historic property and/or historical resource
Moffett Blvd./Rt. 101 Interchange (P-43-001473)	NWIC	Pre-contact lithic scatter	Not evaluated, Potential historic property and/or historical resource
P-43-003172	NWIC	Pre-contact habitation scatter	Not evaluated, Potential historic property and/or historical resource
711 Church Street (P-43-003180)	NWIC	Pre-contact site	Not evaluated, Potential historic property and/or historical resource
C-1512 (P-43-003530)	NWIC	Pre-contact site	Not evaluated, Potential historic property and/or historical resource

SOURCE: NWIC 2022

4.4.3 Regulatory Setting

Federal

Under federal law, historical and archaeological resources are considered through the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108), and its implementing regulations. Before an “undertaking” (e.g., federal funding or issuance of a federal permit) is implemented, Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the national register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. Under the NHPA, a property is considered significant if it meets the National Register listing criteria A through D, at 36 Code of Federal Regulations 60.4, as follows:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- a) Are associated with events that have made a significant contribution to the broad patterns of our history, or

- b) Are associated with the lives of persons significant in our past, or
- c) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
- d) Have yielded, or may be likely to yield, information important in prehistory or history.

For a resource to be eligible for the National Register, it must also retain enough integrity to be recognizable as a historic property and to convey its significance. Resources that are less than 50 years old are generally not considered eligible for the National Register.

Federal review of the effects of undertakings on significant cultural resources is carried out under Section 106 of the NHPA and is often referred to as “Section 106 review.” This process is the responsibility of the federal lead agency and occurs when an undertaking involves federal funding or a federal approval action. Section 106 review typically involves a four-step procedure, which is described in detail in the implementing regulations of the NHPA (36 Code of Federal Regulations 800):

- Define the Area of Potential Effects in which an undertaking could directly or indirectly affect historic properties;
- Identify historic properties in consultation with the State Historic Preservation Office and interested parties;
- Assess the significance of effects of the undertaking on historic properties; and
- Consult with the State Historic Preservation Officer, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation and proceed with the project according to the conditions of the agreement.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978 protects the rights of Native Americans to freedom of expression of traditional religions (24 U.S.C. Section 1996). This act established “the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions... including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.”

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990, provides for increased involvement of Native Americans in archaeology and historic preservation. The Native American Graves Protection and Repatriation Act addresses the rights of lineal descendants and Indian tribes to recover Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are held by the federal government (25 U.S.C. Section 3001). These parties are to be consulted when such items are inadvertently discovered or intentionally excavated on federal or tribal lands.

State

The State of California implements the NHPA of 1966, as amended, through its statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation, as an office of the California Department of Parks and Recreation, implements the policies of the preservation act on a statewide level. The Office of Historic Preservation also maintains the California Historical Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions.

CEQA and the California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). Certain resources are determined by the statute to be automatically included in the California Register, including those formally determined eligible for or listed in the National Register (PRC 5024.1[d][1]). These resources are termed “historical resources.”

Based on Section 15064.5(a) of the CEQA Guidelines, historical resources include, but are not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant or that is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource is considered by a lead agency to be “historically significant” if the resource meets the criteria for listing in the California Register (PRC Section 5024.1), or qualifies as a “unique historical resource” (PRC Section 21083.2). As noted in Section 15062.5(a)(4), the fact that a resource is not listed in, or determined eligible for listing in the California Register or in a local register “does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.”

To be eligible for the California Register, a cultural resource must meet one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

For a resource to be eligible for the California Register, it must also retain enough integrity of location, design, setting, materials, workmanship, feeling, and association to be recognizable as a historical resource and to convey its significance. Resources that are less than 45 years old are generally not considered eligible for the California Register.

Impact assessment under CEQA considers only historically significant cultural resources; that is, resources that meet CEQA criteria for eligibility to the California Register (historical resources) or qualify as unique archaeological resources, as detailed below. Impacts on resources that do not meet these criteria are not considered in impact assessment under CEQA. Similarly, for projects with federal involvement, only resources that meet the criteria of eligibility for the National Register receive further consideration in impact analysis.

CEQA considers archaeological resources as an intrinsic part of the physical environment and thus requires that, for any project, the potential of the project to adversely affect archaeological resources be analyzed (CEQA Section 21083.2). For a project that may have an adverse effect on a significant archaeological resource, CEQA requires preparation of an environmental impact report (CEQA Section 21083.2 and CEQA Guidelines Section 15065). CEQA recognizes two different categories of significant archaeological resources: “unique” archaeological resource (CEQA Section 21083.2) and an archaeological resource that qualifies as a “historical resource” under CEQA (CEQA Section 21084.1 and CEQA Guidelines Section 15064.5).

Public Resources Code Section 21074 (AB 52)

Assembly Bill 52 (AB52), enacted in September 2014, amended CEQA to explicitly recognize that California Native American tribes have expertise with regard to their tribal history and practices. AB 52 established a new category of cultural resources known as tribal cultural resources in order to consider tribal cultural values when determining impacts on cultural resources. Public Resources Code Section 21074(a) defines a tribal cultural resource as any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - included or determined to be eligible for inclusion in the California Register; or
 - included 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 Public Resources Code Section 5024.1(c).³ In applying these criteria, the lead agency would consider the significance of the resource to a California Native American tribe.
- A cultural landscape that meets the criteria of CEQA Section 21074(a)⁴ also is a tribal cultural resource if the landscape is geographically defined in terms of the size and scope.

² Public Resources Code Section 5020.1(k) defines “local register of historical resources” as “a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.”

³ The criteria set forth in Public Resources Code Section 5024.1(c) include whether a resource: “(1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage. (2) Is associated with the lives of persons important in our past. (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. (4) Has yielded, or may be likely to yield, information important in prehistory or history.”

⁴ A cultural landscape meets the criteria of Public Resources Code Section 21074(a) if it either is “included or determined to be eligible for inclusion in the California Register of Historical Resources” or is “included in a local register of historical resources” pursuant to Section 5020.1(k).

- An historical resource as described in CEQA Section 21084.1,⁵ a unique archaeological resource as defined in CEQA Section 21083.2,⁶ or a non-unique archaeological resource as defined in CEQA Section 21083.2⁷ may also be a tribal cultural resource if it meets the criteria of CEQA Section 21074(a).

AB 52 requires lead agencies to analyze project impacts on “tribal cultural resources” separately from archaeological resources (Public Resources Code Sections 21074, 21083.09), in recognition that archaeological resources have cultural values beyond their ability to yield data important to prehistory or history. AB 52 also defines “tribal cultural resources” in Public Resources Code Section 21074 (see above), and requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (Public Resources Code Sections 21080.3.1, 21080.3.2, 21082.3).

Assembly Bill 168 – Tribal Consultation under Streamlined Ministerial Approval Process (SB 35)

Assembly Bill 168 (AB 168), enacted in September 2020, amended the Government Code Sections 65400, 65913.4, and 65941.1, to add tribal consultation requirements to housing projects which would otherwise qualify for a streamlined ministerial approval process which was mandated by Senate Bill 35 (SB 35) in 2017. SB 35 requires cities who are not meeting their demand for housing (as per the Regional Housing Needs Assessments) to allow developers to avoid the requirement of a CEQA document if the proposed housing meeting specific requirements, such as the number of units, zoning, affordability, and avoidance of specific environmental impacts. AB 168 added a requirement to SB 35 which prescribes that developers must submit a preliminary application with information about the project and the local government must conduct tribal consultation with tribes, similar to what is required by CEQA and AB 52, to identify if there are tribal cultural resources that may be impacted by the project. If impacts to tribal cultural resources are identified, the project is ineligible for SB 35 streamlining and is subject to CEQA.

Senate Bill 18

Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use

⁵ Public Resources Code Section 21084.1 defines an “historical resource” as “a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources.”

⁶ Public Resources Code Section 21083.2(g) defines “unique archaeological resource” as “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information. (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type. (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.”

⁷ Public Resources Code Section 21083.2(h) defines “nonunique archaeological resource” as “an archaeological artifact, object, or site which does not meet the criteria in subdivision (g).”

decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.

Native American Heritage Commission

The Native American Heritage Commission (NAHC) identifies and manages a catalog of places of special religious or social significance to Native Americans. This database, known as the Sacred Lands File (SLF), is a compilation of information on known graves and cemeteries of Native Americans on private lands and other places of cultural or religious significance to the Native American community. The NAHC also performs other duties regarding the preservation and accessibility of sacred sites and burials and the disposition of Native American human remains and burial items.

Public Resources Code Sections 5097.9 through 5097.991 describe the duties and role of the NAHC and requires the cooperation of State and local agencies in carrying out their duties with respect to Native American resources.

California Public Resources Code and California Health and Safety Code Provisions Regarding Human Remains

California Health and Safety Code Section 7050.5 protects human remains by prohibiting the disinterring, disturbing, or removing of human remains from any location other than a dedicated cemetery. Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) also identify steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. Health and Safety Code Section 7052 states that the disturbance of Native American, or any other, human remains is a felony, unless the disturbance has been lawfully authorized.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Land Use and Design Element of the General Plan includes the following policies related to cultural resources and tribal cultural resources (City of Mountain View, 2012).

Goal LUD-11: Preserved and protected important historic and cultural resources.

Policy LUD 11.1: Historical preservation. Support the preservation and restoration of structures and cultural resources listed in the Mountain View Register of Historic Resources, the California Register of Historic Places[sic] or National Register of Historic Places.

Policy LUD 11.2: Adaptive re-use. Encourage the adaptive re-use of historic buildings in ways that retain their historical materials and character-defining features.

Policy LUD 11.3: Incentives. Encourage historical preservation through incentives and opportunities.

Policy LUD 11.4: Moffett Field. Support the preservation of historic buildings and hangars at Moffett Field and NASA Ames.

Policy 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.

Action LUD 11.5.1: Review Historic Property Directory List. Prior to approval of development permits for projects that include ground-disturbing activities, City staff shall review the most recent and updated Northwest Information Center list: Historic Property Directory for the County of Santa Clara, to determine if known archaeological and paleontological sites underlie the proposed project. If it is determined that known cultural resources are within ¼ mile of the project site, the City shall require the project applicant to conduct a records search at the Northwest Information Center (NWIC) at Sonoma State University to confirm whether there are any recorded cultural resources within or adjacent to the project site. Based on that research, the City shall determine whether field study by a qualified cultural resources consultant is recommended.

Policy LUD 11.6: Human remains. Require all new development to meet state codes regarding the identification and protection of human remains.

Mountain View Zoning Code

The City of Mountain View Zoning Code includes regulations to guide consideration and development of historic resources. It also includes procedures to recognize historic resources as well as incentives to encourage adaptive reuse as an alternative to demolition. Section 36.54.55(c) defines a historic resource as “any building, structure, object or site that the city council has designated for inclusion in the Mountain View Register of Historic Resources.” Section 36.54.55 (d) establishes the Mountain View Register of Historic Resources as “the inventory of buildings, structures, objects and sites designated by the city council as historic resources pursuant to the provisions of this ordinance and adopted by council resolution as amended from time to time. The Mountain View Register of Historic Resources shall be the City’s only ‘local register of historical resources’ under Public Resources Code Section 5024.1.”

Other sections of the Zoning Code that guide development of historic resources include:

Section 36.54.75 (d): Predemolition Review. Prior to the issuance of a demolition permit for any building, which had been designated as a historic resource pursuant to Section 36.54.70, the applicant shall meet with city staff to review the alternatives, incentives and options to demolition. The applicant shall be notified in writing of the time and place of the meeting within thirty (30) days of filing a complete application for a demolition permit. The council may, by resolution, require additional historic buildings, not otherwise designated, to go through this review process.

Section 36.54.85 – Requirement of Permit – Development Review Process

- a. Applicability.** No person shall make a significant alteration, redevelop, or relocate any structure or improvement, or any portion thereof, upon a property designated as a historic resource on the Mountain View Register of Historic Resources without first obtaining a "historic preservation permit" or HP permit. An HP permit shall remain in effect for four (4) years from the date of approval.

b. Exceptions.

1. **Exempt alteration.** A historic preservation permit shall not be required for an exempt alteration. The city council may, by resolution, adopt a list of alterations that are deemed to be exempt alterations.
 2. **Hazardous or unsafe conditions.** Construction, alteration or demolition necessary to correct the unsafe or dangerous condition of any structure, or other feature or part thereof, where such condition has been declared unsafe or dangerous, in writing, by the chief building official or fire marshal and where said officials have declared the proposed measures necessary on an urgency basis to correct the condition. In no event shall any work be performed which is not absolutely necessary to correct the immediate danger created by the unsafe or dangerous condition, and such work shall be done with due regard for preservation of the appearance of the structure involved.
 3. **Ordinary repair and maintenance.** Nothing in this section shall be construed to prevent the ordinary repair and maintenance of any architectural feature of a designated historic resource. The owner of a designated historic resource shall keep and maintain in good condition and repair all exterior portions of the resource and all interior portions whose maintenance is necessary to prevent deterioration and decay of the exterior feature.
 4. **Special submittal requirements.** The application shall be submitted to the community development department and, in addition to the application requirements of this division, shall contain information and documentation, including architectural drawings and specifications (site plan, elevations, floor plans and building materials); current photographs, sketches, drawings or other descriptive materials necessary to illustrate the proposed alteration; and any other information, which could include an historical assessment by a professional consultant, as determined to be necessary by the community development department for a complete and adequate application.
- c. Hearings and action.** Applications for HP permits shall be initially reviewed by the development review committee. The development review committee shall forward a recommendation to the zoning administrator, who shall hold a duly noticed public hearing in accordance with Section 36.56 (Applications, Hearings and Appeals).
- d. Findings.** The HP permit may be approved or conditionally approved if the following findings are made:
1. The proposed significant alteration will not result in a substantial adverse change in the significance of the historic resource.
 2. The proposed significant alteration maintains and enhances the appearance of the community.

SEC. 36.54.90. - National and California Register properties. Alterations to buildings which are eligible for the National Register of Historic Places or the California Register of Historical Resources shall be reviewed pursuant to Section 36.54.85 "a.," "b.," "c.," "d." and "e.," and except that the city council shall determine whether to grant an HP Permit and the council must find that the alteration is in substantial compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. If an HP Permit is granted, any structure proposed to replace a historic resource shall be subject to design review and approval by the city council.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (as of October 25, 2021). For all construction activities, the City has standard conditions relating to the discovery of archaeological resources, human remains, and the preservation historic architectural resources. The City also has standard conditions for construction work cultural sensitivity training, Native American monitoring, and procedures in the event of the discovery of tribal cultural resources, that can be included if they are requested by a tribe during tribal consultation for a project.

Vibration and Settlement Plan– For Projects Adjacent to Historic Structures

At building permit submittal, the applicant shall prepare a Vibration and Settlement Plan which specifies monitoring and mitigation measures to avoid damage to the adjacent building(s) as a result of project construction. Approved monitoring protocols shall be in place prior to issuance of any building permits for the project.

Secretary of the Interior Standards

All construction activities, including maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, or reconstruction of the historical resource, shall be conducted in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Documentation of Historic Resources

Prior to issuance of building permit for any work being done on the historic structure, the applicant shall provide the following documentation: (1) two copies of each historical assessment, printed on archival paper, and (2) two complete sets of photographs of the existing property (including the immediate neighborhood to establish context), the site (including any nonhistoric structures), all exterior elevations and features, and all interior spaces and features. The applicant shall utilize a 35-mm camera with black and white film only. The photographs shall be printed on fiber paper, and all negatives and prints must meet the Historic American Building Survey Photographic Standards for archival processing.

All documentation shall be forwarded to the Planning Division (one copy of which will be forwarded to the Mountain View History Center) prior to the issuance of any building or demolition permits for the property.

Salvage Program

The applicant shall undertake a salvage program to save and promote reuse of the buildings’ historically significant materials and features to the extent reasonably feasible. Salvage allows for the removal of individual architectural elements for potential reuse. Salvaged elements could be reused at the project site or another project or be given to an architectural salvage company. Salvage has the added benefit of landfill and waste diversion.

Discovery of Archaeological Resources

If prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities, it is recommended that all work within 100 feet of the find be halted until a qualified

archaeologist and Native American representative can assess the significance of the find. Prehistoric materials might include obsidian and chert-flaked stone tools (e.g., projectile points, knives, scrapers) or tool-making 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 walls; 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 the Native American representative, will 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 their authority, the Coroner shall notify the Native American Heritage Commission, 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 the release of a Certificate of Occupancy. This report shall contain a description of the mitigation 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.

(If Requested) Cultural Sensitivity Training

As requested during the Tribal Consultation process for the project, 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 the indigenous history of peoples in the vicinity of the project site.

(If Requested) Native American Archaeological Monitor

A Native American archaeological monitor shall be present for all ground-disturbing activities throughout the project construction process.

(If Requested) Discovery of Tribal Cultural Resources

If indigenous or historic-era archaeological resources are encountered during construction 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 a Native American representative shall be immediately informed of the discovery. The qualified archaeologist and the Native American 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, hand stones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

4.4.4 Significance Criteria

The thresholds used to determine the significance of impacts related to cultural resources and tribal cultural resources are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of dedicated cemeteries.
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Approach to Analysis

This is a program-level EIR that considers the potential impacts from implementing the HEU. While the HEU would be applicable Citywide, special focus was given to housing inventory sites where multifamily housing development is planned. Impacts on cultural resources and tribal cultural resources are evaluated using the criteria listed above and based on information included in the *Mountain View 2030 General Plan* (2012) and the *Standard Planning Division Conditions* (2021).

4.4.5 Impacts of the Project

Impact CUL-1: Implementation of the HEU would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. (*Less than Significant with Mitigation*)

The City of Mountain View contains a number of recognized historic resources that are listed, or have been determined eligible for listing on the National, State, and local registers. Not all eligible buildings have been identified or evaluated and the City has a significant number of buildings that were constructed 50 or more years ago that may qualify as historic resources pending additional evaluation. The Project would plan for approximately 15,000 new housing units during the HEU planning period to the year 2031. Of the total units it is assumed that 1,400 units would be enabled by changes in development capacity via rezoning. The balance of approximately 13,600 units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. In addition, the analysis in this EIR also considers approximately 2,700 units beyond 2031 that would be enabled by changes in development capacity via rezoning. While growth is anticipated primarily in urban infill areas along commercial corridors and redevelopment of existing parking and industrial sites, some growth is anticipated through wider construction of accessory dwelling units (ADUs) and rehabilitation and renovation of existing lower income housing. As a result, there is a potential for significant direct and indirect impacts to known and potential historic resources located throughout the city.

However, the City has made a concerted effort to avoid including sites in the housing sites inventory that may include historic resources, and as noted above, the City has adopted numerous policies to guide the recognition and development of historic resources and all new projects would be subject to these provisions. 2030 General Plan policies LUD 11.1: Historical Preservation, LUD 11.2: Adaptive Reuse, LUD 11.3: Incentives, and LUD 11.4: Moffett Field in combination with the provisions codified under Article XVI, Division 15 of the City of Mountain View Zoning Ordinance, such as the HP Permit review process (zoning code Sections 36.54.85 and 36.54.90), serve to limit the impacts of specific projects on known historic resources that have been listed in the National, State, or local registries.

These existing policies and procedures guide development for known historic resources, including those already listed on the National, State, and local registers. In addition, the City of Mountain View regularly updates their city-wide survey of historic and potentially historic buildings. These updates include periodic update surveys to identify buildings that meet the CEQA recommended age threshold of 45-years or older. Buildings that are potentially historic are then documented on DPR forms. For those properties that have not already been evaluated or have not previously been identified by the City as potential historic resources the following mitigation measures are included here.

Mitigation Measure CUL-1a: Historic Resource Evaluation

Prior to issuance of a demolition permit for any previously unevaluated building 45-years of age or older on a site included in the housing sites inventory, the City shall require an evaluation of historical significance that includes consideration of the criteria for listing

in the National Register of Historic Places, the California Register of Historical Resources, and the Mountain View Register of Historic Resources. This evaluation shall be completed by a professional who meets the Secretary of the Interior's Professional Qualifications for History, Architecture, Architectural History, or Historic Architecture.

In accordance with Section 5024.1, if the building has been previously evaluated for eligibility as a historic resource under CEQA and that evaluation or survey is more than five-years old, the findings of that evaluation should be confirmed by a professional who meets the Secretary of the Interior's Professional Qualifications as stated above.

Mitigation Measure CUL-1b: Historic Resource Avoidance

If, after implementation of Mitigation Measure CUL-1a, the subject property is found to qualify as a historic resource and the proposed project includes demolition of the historic resource, the project shall be redesigned to remove or avoid demolition. Any redesign that includes significant alteration of the historic resource, as defined by Section 36.54.55(e) of the City of Mountain View Zoning Code, shall be required to comply with City Standard Condition of Approval (Secretary of the Interior Standards).

Significance after Mitigation: Housing development planned under the HEU could result in the demolition or significant alteration of potential historical resources (as defined in Sec. 36.54.55 of the Zoning Code). It could also diminish the ability of historical resources to convey their historical significance, which would constitute a substantial adverse change in the significance of the resources. However, with implementation of the General Plan polices noted above, adherence to existing zoning and permit procedures, and application of Mitigation Measure CUL-1a and CUL-1b, impacts to known and potential historic resources at the National, State, and local levels would be reduced to **less than significant**.

Impact CUL-2: Implementation of the HEU may cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. (*Less than Significant with Mitigation*)

As described above in the *Environmental Setting*, a records search identified previously recorded pre-contact archaeological resources in the City boundary. Given the long history of pre-contact and historic-era human occupation, the City is considered sensitive for the presence of subsurface cultural resources and human remains.

Archaeological resources have the potential to contain intact deposits of artifacts, associated features, and burials that could contribute to the regional pre-contact or historic record and be of substantial importance to members of the local and regional community. Ground disturbance associated with physical development that could occur under the HEU could result in damage to or destruction of these resources, which would constitute a significant impact.

As detailed in the *Regulatory Setting* above, there are federal, state, and local regulations in place to protect archaeological resources and human remains. CEQA requires lead agencies to determine, prior to approval, if a project would have a significant adverse effect on historical or

unique archaeological resources and requires the lead agency to make provisions for handling the inadvertent discovery of historical or unique archaeological resources during construction.

In addition, the proposed HEU and associated General Plan includes policies and implementation programs designed to identify and protect archaeological resources that could be adversely affected by development activities. For example, Policy LU-11.5 requires that new development meet state codes regarding the identification and protection of archaeological deposits. In coordination with the General Plan policies, the City's Standard Conditions establish protocol in the event of the discovery of cultural materials during construction.

While the aforementioned regulations and policies proposed under the HEU and established through the General Plan and the City's Standard Conditions are protective of archaeological resources, if identified during project construction, they specifically only 'recommend' that a 100 foot buffer be established to halt work around an archaeological materials find and do not provide for avoidance of significant cultural resources. They also do not establish a pre-construction archaeological review of the project to identify and mitigate impacts to potential archaeological resources prior to ground disturbance. For these reasons, there remains the potential for ground-disturbing construction activities to inadvertently damage or destroy archaeological resources, and the impact of the HEU to archaeological resources is potentially significant.

To address this potentially significant impact, **Mitigation Measure CUL-2a, Inadvertent Discovery of Cultural Resources** revises the Discovery of Archaeological Resources Standard Condition to require a stop-work boundary around cultural material finds and establish protocol for avoidance or preservation in place of significant cultural resources, and **Mitigation Measure CUL-2b, Cultural Resources Study Requirements** establishes a requirement for a cultural resource study for all multifamily housing projects that require ground disturbance and are located within 0.25-mile of known cultural resources based upon review of the most recent and updated NWIC list, consistent with General Plan Action LUD 11.5.1. These mitigation measures would address potential impacts to archaeological resources and reduce the potential of the HEU to impact archaeological resources to a less-than-significant level.

Mitigation Measure CUL2a: Inadvertent Discovery of Cultural Resources.

If pre-contact or historic-era archaeological resources are encountered during project construction and implementation, all construction activities within 100 feet shall halt and the City shall be notified. Pre-contact 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the U.S. Secretary of the Interior's Standards (SOIS) for Archeology shall inspect the findings within 24 hours of discovery.

If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented

in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4, with a preference for preservation in place. If preservation in place is feasible, this may be accomplished through one of the following means: (1) siting improvements to completely avoid the archaeological resource; (2) incorporating the resource into a park or dedicated open space, by deeding the resource into a permanent conservation easement; (3) capping and covering the resource before building the project on the resource site after the resource has been thoroughly studied by a SOIS qualified archaeologist and a report written on the findings.

If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).

Mitigation Measure CUL-2b: Cultural Resources Study Requirements.

Prior to approval of development permits for multifamily projects that include ground-disturbing activities, City staff shall review the most recent and updated Northwest Information Center (NWIC) list: Historic Property Directory for the County of Santa Clara, to determine if known archaeological sites underlie the proposed project site. If it is determined that known cultural resources are within 0.25-mile of the project site, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior's Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.

Significance After Mitigation: Implementation of Mitigation Measures CUL-2a and CUL-2b, would reduce the potential impact to a **less-than-significant** level because all projects with ground-disturbance would be reviewed by an SOIS qualified archaeologist

and any potential archaeological resources identified, would be evaluated and treated appropriately, including consulting with Native American representatives.

Impact CUL-3: Implementation of the HEU may disturb any human remains, including those interred outside of dedicated cemeteries. (*Less than Significant*)

As described above, there are cultural resources with human remains within the City boundary. Based on the overall sensitivity of the City for cultural resources, there is the potential for previously unknown human remains to be discovered during ground-disturbing activities. In the event that human remains are discovered, including those interred outside of formal cemeteries, the human remains could be inadvertently damaged, which would be a significant impact for the purposes of CEQA. Implementation of state laws as per General Plan Policy LUD 11.6, and adhering to the Standard Condition of Approval (Discovery of Human Remains) would ensure that any human remains encountered are appropriately addressed because if human remains are identified, work would stop within 100 feet of the find, the Coroner would be called to identify if the remains are Native American and the appropriate treatment of those remains would be determined, all following Health and Safety Code Section 7050.5(c), and Public Resources Code 5097.98 (as amended), thus reducing any potential impacts to a **less-than-significant** level.

Mitigation: None required.

Impact TCR-1: Implementation of the HEU may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. (*Less than Significant with Mitigation*)

The results of the records search identified eleven previously recorded pre-contact archaeological resources identified in the CHRIS record search and there is the potential for unknown pre-contact archaeological resources to be present in the City boundaries.

As detailed in the *Regulatory Setting* above, there are federal, state, and local regulations in place to protect tribal cultural resources, including archaeological resources and human remains. CEQA requires lead agencies to determine, prior to approval, if a project would have a significant adverse effect on historical resources, tribal cultural resources, or unique archaeological resources and requires the lead agency to make provisions for the inadvertent discovery of historical or unique archaeological resources during construction, including tribal cultural resources.

As described previously in this section, SB 18 requires local governments to consult with tribes prior to making certain planning decisions and provides California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places. In accordance with the requirements of SB 18 Mountain View City staff conducted Native American outreach and consultation efforts. As a part the SB 18 process for the proposed HEU, the City emailed thirteen letters to ten tribes based on prior consultation on March 4, 2022 and the City sent tribal outreach letters to eleven Native American representatives from eight tribes that were identified by the City based on a Tribal Consultation list developed by the Native American Heritage Commission on May 11, 2022. No

tribes have responded to the tribal consultation efforts within 90 days and no responses have been received as of July 22, 2022, the filing date of the DEIR.

In addition, the proposed HEU and associated General Plan includes policies and implementation programs designed to identify and protect archaeological resources and human remains that could also be tribal cultural resources and could be adversely affected by development activities. For example, Policy LU-11.5 requires that new development meet state codes regarding the identification and protection of archaeological deposits. In coordination with the General Plan policies, the City's Standard Conditions establish protocol in the event of the discovery of cultural materials during construction.

While the aforementioned regulations and policies proposed under the HEU and established through the General Plan and the City's Standard Conditions are protective of archaeological resources, that may also be tribal cultural resources, if identified during project construction, they specifically only 'recommend' that a 100-foot buffer be established to halt work around an archaeological materials find and do not provide for avoidance of significant cultural resources. They also do not establish a pre-construction archaeological review of the project to identify and mitigate impacts to potential archaeological resources prior to ground disturbance. For these reasons, there remains the potential for ground-disturbing construction activities to inadvertently damage or destroy archaeological resources that may also be tribal cultural resources. Therefore, the impact of the HEU to tribal cultural resources is potentially significant, requiring mitigation.

Mitigation Measure CUL-2a: Inadvertent Discovery of Cultural Resources

Mitigation Measure CUL-2b: Cultural Resources Study Requirements

Significance After Mitigation: Implementation of Measures CUL-2a and CUL-2b would establish protocol to identify, evaluate, and address any potential impacts to previously unknown tribal cultural resources. With implementation of these mitigation measures, any potential impacts to tribal cultural resources would be reduced to a **less than significant** level.

4.4.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to cultural resources could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on historic architectural resources, archaeological resources, and human remains is the City of Mountain View.

Impact CUL-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on historic architectural resources. (*Less than Significant with Mitigation*)

Despite City policies and regulations, future development projects within the City of Mountain View could potentially impact architectural historic resources that may be present. The cumulative effect of this future development would be the continued loss of significant architectural historic resources. Potential future development increases the likelihood that additional architectural historic resources could be lost. It is therefore possible that cumulative development could result in the demolition or destruction of significant architectural historic resources. The loss of these resources would result in a significant impact, and potential impacts associated with the HEU would be considered cumulatively considerable, resulting in a potentially **significant impact**.

Implementation of Mitigation Measure CUL-1a which would require previously unevaluated historic-age resources be evaluated, Mitigation Measure CUL-1b would require demolition avoidance for historic architectural resources, and City Standard Condition of Approval (Secretary of the Interior Standards) which would require Secretary of the Interior's Standards compliance review for significant alterations of historic resources, would reduce the severity of impacts associated with the HEU. Combined with General Plan Policies LUD 11.1 – 11.4 and the procedures for identification and alteration of historic resources in Division 15 of the Mountain View Zoning Code, the impacts associated with implementation of the HEU would be mitigated to a less than significant level. The General Plan Policies and Zoning Code also apply to all projects identified in the cumulative project list. As a result, the HEU's contribution to the potentially significant cumulative impact on historic architectural resources would not be considerable, and the cumulative impact of the HEU combined with cumulative development would be **less than significant**.

Mitigation Measure: Implement Mitigation Measures CUL-1a and CUL-1b.

Significance After Mitigation: Combined with General Plan Policies LUD 11-1 – 11.4 and the regulations for historic resource identification and alteration in the Mountain View Zoning Code, Mitigation Measures CUL-1a and CUL-1b would mitigate impacts to historic architectural resources to a **less-than-significant** level.

Impact CUL-2.CU: Implementation of the HEU, in combination with other cumulative development, would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or could disturb human remains, including those interred outside of formal cemeteries. (*Less than Significant Impact with Mitigation*)

Future development in the City could include excavation and grading that could potentially impact archaeological resources and human remains that may be present. The cumulative effect of this future development is the continued loss of cultural remains. Potential future development increases the likelihood that additional archaeological resources could be uncovered. It is

therefore possible that cumulative development could result in the demolition or destruction of unique archaeological resources, which could contribute to the erosion of the pre-contact record of the City. The loss of these resources would result in a potentially significant cumulative impact, and the Project's contribution would be cumulatively considerable prior to mitigation.

Though archaeological resources can sometimes be preserved when discovered during excavation, there is no guarantee that these resources can be protected and preserved. The HEU would contribute a negligible **less than significant** impact after the implementation of Measures CUL-2a and CUL-2b, which would require a SOIS qualified archaeologist to conduct a review of discretionary projects, or projects near known cultural resources, or within archaeological sensitivity areas, prior to construction, the cessation of activities in the vicinity of finds, and tribal consultation when indigenous resources are inadvertently identified during project construction. As a result, the less-than-significant incremental impact would not be cumulatively considerable and thus would not combine with the incremental impact of other projects to cause a significant cumulative effect.

Impact TCR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on tribal cultural resources. (*Less than Significant with Mitigation*)

The geographic scope for cumulative impacts to tribal cultural resources comprises the entire city of Mountain View. This geographic scope of analysis is appropriate because the archaeological and tribal cultural resources within this radius are expected to be similar to those that occur on the HEU multifamily housing sites because their proximity, similar environments, landforms, and hydrology are expected to have resulted in similar land-uses over time. Based on the professional experience of the EIR preparers, research, and the pre-contact context, the area within this area of analysis may contain tribal cultural resources that have not been documented or recorded. Therefore, this analysis conservatively assumes that the land within this area contains tribal cultural resources that are not yet known.

In this context, the incremental impacts of the HEU could combine with similar incremental impacts of other projects in the cumulative scenario to cause or contribute to a significant cumulative impact.

However, the HEU would contribute a negligible **less-than-significant** incremental impact after the implementation of Measures CUL-2a and CUL-2b, which would require an SOIS qualified archaeologist conduct a review of the project prior to construction, the cessation of activities and buffering of finds, and tribal consultation when indigenous resources are unexpectedly discovered during project construction. As a result, the Project's incremental impact would not be cumulatively considerable and would not result in a significant cumulative effect.

4.4.7 Summary of Cultural Resources and Tribal Cultural Resources Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
<p>Impact CUL-1: Implementation of the HEU would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.</p>	Potentially Significant	<p>Mitigation Measure CUL-1a: Historic Resource Evaluation</p> <p>Mitigation Measure CUL-1b: Historic Resource Avoidance</p>	Less than Significant
<p>Impact CUL-2: Implementation of the HEU may cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	Potentially Significant	<p>Mitigation Measure CUL-2a: Inadvertent Discovery of Cultural Resources</p> <p>Mitigation Measure CUL-2b: Cultural Resources Study Requirements</p>	Less than Significant
<p>Impact CUL-3: Implementation of the HEU may disturb any human remains, including those interred outside of dedicated cemeteries.</p>	Less than Significant	None required	-
<p>Impact TCR-1: Implementation of the HEU may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074.</p>	Potentially Significant	<p>Mitigation Measure CUL-2a: Inadvertent Discovery of Cultural Resources</p> <p>Mitigation Measure CUL-2b: Cultural Resources Study Requirements</p>	Less than Significant
<p>Impact CUL-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on historic architectural resources.</p>	Potentially Significant	<p>Mitigation Measure CUL-1a: Historic Resource Evaluation</p> <p>Mitigation Measure CUL-1b: Historic Resource Avoidance</p>	Less than Significant
<p>Impact CUL-2.CU: Implementation of the HEU, in combination with other cumulative development, would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or could disturb human remains, including those interred outside of formal cemeteries.</p>	Potentially Significant	<p>Mitigation Measure CUL-2a: Inadvertent Discovery of Cultural Resources</p> <p>Mitigation Measure CUL-2b: Cultural Resources Study Requirements</p>	Less than Significant
<p>Impact TCR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on tribal cultural resources.</p>	Potentially Significant	<p>Mitigation Measure CUL-2a: Inadvertent Discovery of Cultural Resources</p> <p>Mitigation Measure CUL-2b: Cultural Resources Study Requirements</p>	Less than Significant

4.4.8 References

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4.5 Energy

4.5.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on energy use and conservation. This section first includes a description of the existing environmental setting as it relates to energy, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on energy resources.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to energy were received during the NOP comment period.

The information in this section has been prepared in accordance with Public Resources Code (PRC) Section 21100(b)(3), CEQA Guidelines Section 15126.2(b), and CEQA Guidelines Appendix F. CEQA Guidelines Section 15126.2(b) and Appendix F provide that an EIR should evaluate potential impacts of a proposed project as a result of the demand for energy during the project's construction and operational phases and encourage measures to avoid or reduce inefficient, wasteful, or unnecessary consumption of energy.

4.5.2 Environmental Setting

State Energy Profile

In 2019, total energy usage in California was 7,802 trillion British thermal units (Btu) (the most recent year for which these specific data are available), which equates to an average of 198 million Btu per capita per year. These figures place California second among the 50 states in total energy use and 50th in per-capita consumption. Of California's total energy usage, the breakdown by sector is roughly 39.4 percent transportation, 23.1 percent industrial, 18.8 percent commercial, and 18.7 percent residential. Electricity and natural gas in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum-based fuel consumption is generally accounted for by transportation-related energy use (United States Energy Information Administration [USEIA], 2022).

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, coal, and nuclear gas generation resources. Approximately 70 percent of the electrical power needed to meet California's demand is produced in the state; the balance, approximately 30 percent, is imported from the Pacific Northwest and the Southwest. In 2020, California's in-state electricity use was derived from natural gas (48 percent); coal (< 1 percent); large hydroelectric resources (9 percent); nuclear sources (9 percent); renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (33 percent) (CEC, 2022a).

Regional Setting

Electricity

Electricity, as a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of resources—including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources—into useable energy. The delivery of electricity involves several system components for distribution and use. Electricity is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on would be 100 watt-hours. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 watt-hours or 1 kilowatt-hour. On a utility scale, the capacity of a generator is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours, which is one billion watt-hours.

Pacific Gas and Electric Company (PG&E) provides electrical and natural gas services to approximately 16 million people throughout its 70,000-square-mile service area in northern and central California, from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east (PG&E, 2022a). PG&E produces and purchases energy from a mix of conventional and renewable generating sources. Approximately 31 percent of PG&E’s 2020 electricity purchases were from renewable sources (PG&E, 2022b). Refer to **Table 4.5-1** for a summary of electricity use in the state and PG&E service area.

**TABLE 4.5-1
 EXISTING ANNUAL STATE AND REGIONAL ENERGY USE**

Source	Amount
Electricity (State/PG&E) ^a	279,510 GWh / 78,519 GWh
Natural Gas (State/PG&E) ^a	1,232,858,394 MMBtu / 450,746,500 MMBtu
Gasoline (Statewide/Santa Clara County) ^b	12,572 million gallons / 511 million gallons
Diesel (Statewide/ Santa Clara County) ^b	4,254 million gallons / 71 million gallons

NOTES:

MMBtu = million British thermal units; MWh = megawatt-hours; PG&E = Pacific Gas and Electric Company.

SOURCES: ^a CEC, 2022b; ^b CEC, 2020

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of California’s total energy requirements and is measured in terms of both cubic feet and Btu.

PG&E provides natural gas transportation services to “core” customers and to “non-core” customers (industrial, large commercial, and natural gas-fired electric generation facilities) that

are connected to its gas system in its service territory. Core customers can purchase natural gas procurement service (natural gas supply) from either PG&E or non-utility third-party gas procurement service providers (referred to as “core transport agents”). When core customers purchase gas supply from a core transport agent, PG&E still provides gas delivery, metering, and billing services to those customers. When PG&E provides both transportation and procurement services, PG&E refers to the combined service as “bundled” natural gas service.

PG&E does not provide procurement service to non-core customers, who must purchase their gas supplies from third-party suppliers. PG&E offers backbone gas transmission, gas delivery (local transmission and distribution), and gas storage services as separate and distinct services to its non-core customers. Access to PG&E’s backbone gas transmission system is available for all natural gas marketers and shippers, as well as non-core customers. PG&E also delivers gas to off-system customers (i.e., outside of PG&E’s service territory) and to third-party natural gas storage customers. 2020 natural gas usage for the state and the PG&E service region are also shown in Table 4.5-1.

Transportation Energy

In 2021, 11.5 billion gallons of gasoline and 2.6 billion gallons of diesel fuel were consumed in California (CDTFA, 2022a, 2022b). Petroleum-based fuels currently account for more than 85 percent of ground transportation fuel use in California (USEIA, 2022).

The State is now working on developing flexible strategies to reduce petroleum used. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, total gasoline consumption in California has declined. According to fuel sales data from the California Energy Commission (CEC), fuel consumption in Santa Clara County was approximately 511 million gallons of gasoline and 71 million gallons of diesel fuel in 2020 (CEC, 2020). Refer to Table 4.5-1 for a summary of statewide fossil fuel consumption in 2020.

Local Setting

PG&E provides natural gas service to the City of Mountain View, while electricity is provided by both PG&E and Silicon Valley Clean Energy (SVCE). SVCE is a public, not-for-profit agency that provides clean electricity for 270,000 residential and business customers across 13 Silicon Valley communities. SVCE works closely with PG&E, which delivers electricity over power lines to homes and businesses.

Residents and businesses in Mountain View have the option to choose between PG&E or SVCE as a provider to supply their electric power. By default, all customers in Mountain View are enrolled in SVCE’s “GreenStart”, which is made up of carbon free and 50 percent renewable power. SVCE customers can also choose to opt-up to SVCE’s “GreenPrime” option. SVCE’s GreenPrime provides electricity from 100 percent renewable and carbon-free sources, such as solar, wind and geothermal in California and on the western grid. Consumers can also opt to keep PG&E as their energy provider, whose energy clicks in at about 31 percent renewables currently.

4.5.3 Regulatory Setting

Federal

National Energy Conservation Policy Act

The National Energy Conservation Policy Act (NECPA) serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, NECPA has been regularly updated and amended by subsequent laws and regulations. This law is the foundation of most federal energy requirements. NECPA established energy-efficiency standards for consumer products and includes a residential program for low-income weatherization assistance, grants, and loan guarantees for energy conservation in schools and hospitals, and energy-efficiency standards for new construction. New and continuing initiatives in these areas are ongoing.

Energy Policy Act of 1992

The Energy Policy Act of 1992 was enacted to reduce U.S. dependence on foreign petroleum and improve air quality. This law includes several provisions intended to build an inventory of alternative-fueled vehicles in large, centrally-fueled fleets in metropolitan areas. The Energy Policy Act of 1992 requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty alternative fuel vehicles capable of running on alternative fuels each year. Financial incentives are also included. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of alternative fuel vehicles. The Energy Policy Act of 1992 also requires states to consider a variety of incentive programs to help promote alternative-fuel vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), which was signed in 2009.

Influence of the U.S. Department of Transportation, U.S. Department of Energy, and U.S. Environmental Protection Agency on Transportation Energy

At the federal level, the U.S. Department of Transportation, U.S. Department of Energy, and U.S. Environmental Protection Agency (EPA) have substantial influence over energy policies related to fuel consumption in transportation. Generally, federal agencies influence transportation energy consumption by establishing and enforcing fuel economy standards for automobiles and light trucks, and by funding projects for energy-related research and development for transportation infrastructure.

Corporate Average Fuel Economy Standards

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are responsible for establishing additional vehicle standards. In August 2012, standards were adopted for model years 2017 through 2025 for passenger cars and light-duty trucks. According to U.S. EPA, a model year 2025 vehicle would emit half the GHG emissions of a model year 2010 vehicle (USEPA, 2012). Notably, the State of California harmonized its vehicle efficiency standards through 2025 with the federal standards at this time (see *Advanced Clean Cars Program* below).

In August 2018, U.S. EPA and the NHTSA proposed maintaining the 2020 corporate average fuel economy (CAFE) and CO₂ standards for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 miles per gallon (mpg) and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. In September 2019, U.S. EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013 (USEPA & NHTSA, 2019). However, on March 9, 2022, U.S. EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and zero emission vehicle (ZEV) sales mandate (USEPA, 2022).

State

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is a state agency created by a constitutional amendment to regulate privately owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-state moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, and distribution facilities, and the local distribution pipelines for natural gas.

California Energy Commission

The CEC is the primary energy policy and planning agency in California. Created by the California Legislature in 1974, the CEC has five major responsibilities: (1) forecast future energy needs and keep historical energy data; (2) license thermal power plants 50 MW or larger; (3) promote energy efficiency through appliance and building standards; (4) develop energy technologies and support renewable energy; and (5) plan for and direct the state response to energy emergencies.

Senate Bill 1389

Senate Bill (SB) 1389 (PRC Sections 25300–25323) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the electricity, natural gas, and transportation fuel sectors in California, and to provide policy recommendations

to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state economy; and protect public health and safety (PRC Section 25301(a)).

The 2019 Integrated Energy Policy Report provides the results of CEC assessments on a variety of energy issues facing California:

- Energy efficiency;
- Strategies related to data for improved decisions in the Existing Buildings Energy Efficiency Action Plan;
- Building energy efficiency standards;
- The impact of drought on California’s energy system;
- Achieving 50 percent renewables by 2030;
- The California Energy Demand Forecast;
- The Natural Gas Outlook;
- The Transportation Energy Demand Forecast;
- Alternative and Renewable Fuel and Vehicle Technology Program benefits updates;
- An update on electricity infrastructure in Southern California;
- An update on trends in California sources of crude oil;
- An update on California nuclear plants; and
- Other energy issues.

California Global Warming Solutions Act of 2006

In 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (codified in the California Health and Safety Code, Division 25.5), which focused on reducing GHG emissions in California to 1990 levels by 2020. Under Health and Safety Code Division 25.5, the California Air Resources Board (CARB) has the primary responsibility for reducing GHG emissions in California; however, AB 32 also tasked the CEC and CPUC with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, Governor Jerry Brown signed SB 32 and its companion bill, AB 197. SB 32 and AB 197 amended Health and Safety Code Division 25.5 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030, with provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. Refer to Section 4.8, *Greenhouse Gas Emissions*, for additional details regarding these statutes.

Senate Bills 1078, 107, and 100, and Executive Order S-14-08

The State of California adopted standards to increase the percentage of electricity that retail sellers, including investor-owned utilities and community choice aggregators, must provide from renewable resources. The standards are referred to as the Renewables Portfolio Standard (RPS). The reduces use of non-renewable energy sources, thereby reducing GHG emissions and other negative impacts that are associated with use of non-renewable, finite energy sources. The legislation requires utilities to increase the percentage of electricity obtained from renewable sources to 33 percent by 2020 and 50 percent by 2030.

On September 10, 2018, Governor Brown signed SB 100, which further increased the California RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030. SB 100 also specifies that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

CPUC and the CEC jointly implement the RPS program. The responsibilities of the CPUC are to: (1) determine annual procurement targets and enforce compliance; (2) review and approve the renewable energy procurement plan of each investor-owned utility; (3) review contracts for RPS-eligible energy; and (4) establish the standard terms and conditions used in contracts for eligible renewable energy (CPUC, 2022).

Assembly Bill 117 and Senate Bill 790

In 2002, the State of California passed AB 117, enabling public agencies and joint power authorities to form a Community Choice Aggregation (CCA). SB 790 strengthened it by creating a “code of conduct” that the incumbent utilities must adhere to in their activities relative to CCAs. CCAs allow a city, county, or group of cities and counties to pool electricity demand and purchase/generate power on behalf of customers within their jurisdictions in order to provide local choice. CCAs work with PG&E to deliver power to its service area. The CCA is responsible for the electric generation (procure or develop power) while PG&E is responsible for electric delivery, power line maintenance, and monthly billing.

California Building Standards Code (Title 24, Parts 6 and 11)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR] Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2019 Title 24 standards, which became effective on January 1, 2020. These standards include requirements for solar photovoltaic systems in all new homes, requirements for newly constructed healthcare facilities that were previously not included, the encouragement of demand response and light-emitting diode (LED) technology for both residential and nonresidential buildings, and the use of more efficient air filters to trap hazardous particulates (CEC, 2018a).

The current (2019) version of the California Green Building Standards Code (CCR Title 24, Part 11) is commonly referred to as the CALGreen Code. The 2019 CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality (California Buildings Standards Commission, 2019). The 2019 Energy Code includes provisions for smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The 2019 Energy Code aims to reduce energy use in new homes by requiring that all new homes include individual or community solar photovoltaic systems or community shared battery storage systems that achieve equivalent time-dependent value energy use reduction.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for or after January 1, 2023, must comply with the 2022 Energy Code.

Assembly Bill 1493

In 2019, the transportation sector accounted for approximately 40 percent of carbon dioxide equivalent (CO₂e) emissions in California (CARB, 2021a). AB 1493 (commonly referred to as the Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emissions standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025 (CARB, 2013; USEPA, 2012). Refer to Section 4.7, *Greenhouse Gas Emissions*, for additional details regarding this regulation.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (13 CCR Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure prohibits diesel-fueled commercial vehicles from idling for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

Airborne Toxic Control Measure for Stationary Compression Ignition Engines

In 2004, CARB adopted an Airborne Toxic Control Measure to reduce public exposure to emissions of diesel particulate matter and criteria pollutants from stationary diesel-fueled compression ignition engines (17 CCR Section 93115). The measure applies to any person who

owns or operates a stationary compression ignition engine in California with a rated brake horsepower greater than 50, or to anyone who either sells, offers for sale, leases, or purchases a stationary compression ignition engine. This measure outlines fuel and fuel additive requirements; emissions standards; recordkeeping, reporting and monitoring requirements; and compliance schedules for compression ignition engines.

Truck and Bus Regulation

In addition to limiting exhaust from idling trucks, in 2008 CARB approved the Truck and Bus Regulation to reduce the emissions of oxides of nitrogen and particulate matter from existing diesel vehicles operating in California (13 CCR Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. This regulation will be implemented in phases, with full implementation by 2023.

CARB also promulgated emissions standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installing diesel soot filters and encouraging the retirement, replacement, or repowering of older, dirtier engines with newer emissions-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

California Air Resources Board Advanced Clean Trucks Program

On June 25, 2020, CARB adopted the Advanced Clean Trucks rule, which requires truck manufacturers to transition from diesel vehicles to electric zero-emission vehicles beginning in 2024, with the goal of reaching 100 percent zero-emission vehicles by 2045. The goal of the legislation is to help California meet its climate targets of a 40 percent reduction in GHG emissions and a 50 percent reduction in petroleum use by 2030, and an 80 percent reduction in GHG emissions by 2050.

Truck manufacturers will be required to sell zero-emission vehicles as an increasing percentage of their annual sales from 2024 through 2035. Companies with large distribution fleets (50 or more trucks) will be required to report information about their existing fleet operations in an effort to identify future strategies for increasing zero-emission fleets statewide (CARB, 2021b).

Zero-emission vehicles are two to five times more energy efficient than diesel vehicles, and the Advanced Clean Trucks rule will reduce GHG emissions with the co-benefit of reducing dependence on petroleum fuels.

California Air Resources Board Advanced Clean Car Program

The Advanced Clean Cars emissions-control program, approved by CARB in 2012, is closely associated with the Pavley regulations (CARB, 2013). The program requires a greater number of zero-emissions vehicle models for years 2015 through 2025, to control smog, soot, and GHG emissions. This program includes the Low-Emissions Vehicle regulations to reduce emissions of criteria air pollutants and GHGs from light- and medium-duty vehicles; and the Zero-Emissions

Vehicle regulations, which require manufacturers to produce an increasing number of pure zero-emissions vehicles (battery and fuel cell electric vehicles) and include the provision to produce plug-in hybrid electric vehicles between 2018 and 2025. The increase in low- and zero-emissions vehicles will result in a decrease in the consumption of non-renewable fuels such as gasoline and diesel.

California Environmental Quality Act

Under CEQA (PRC Section 21100(b)(3)), EIRs are required to discuss the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. If the analysis of a proposed project shows that the project may result in significant environmental effects due to the wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, then the EIR must identify mitigation measures to address that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include project size, location, orientation, equipment use, and any renewable energy features that could be incorporated into the project (CEQA Guidelines Section 15126.2(b)).

CEQA Guidelines Appendix F lists the energy-related topics that should be analyzed in the EIR, and more specifically identifies the following topics for consideration in the evaluation of energy impacts in an EIR, to the extent the topics are applicable or relevant to the proposed project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base-period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.¹

The effects of the project relevant to each of these issues are addressed in this section.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Infrastructure and

¹ CEQA Guidelines Appendix F(II)(C).

Conservation Element of the General Plan includes the following policies related to energy (City of Mountain View, 2021).

Goal INC-13: Increase energy efficiency and conservation throughout the city.

Policy INC-13.1: Energy Efficiency and Generation. Increase energy efficiency and conservation in public buildings and infrastructure.

Policy INC-13.2: Alternatives to gasoline. Promote and increase the use of new technologies as alternatives and supplements to gasoline in vehicles throughout the community.

Policy INC-13.3: Coordinating efforts. Support regional and local efforts and programs to reduce energy use.

Policy INC-13.4: Education. Educate the public about energy conservation and efficiency best practices.

Policy INC-13.5: Smart utility meters. Encourage utility meter technologies that provide feedback about energy usage to customers.

Goal INC-14: Sufficient renewable sources of energy to meet current and future demand.

Policy INC-14.1: Renewable energy. Promote the deployment of renewable energy technologies throughout the city.

Policy INC-14.2: Solar energy. Encourage active and passive solar energy use.

Policy INC-14.3: Regional renewable energy. Participate in regional initiatives to encourage and develop renewable energy sources.

Policy INC-14.4: Renewable energy advocacy. Support legislation to facilitate and increase renewable energy choices for community residents such as green utility power options or distributed generation.

2019 Mountain View Green Building and Reach Codes

On November 12, 2019, the City Council adopted the Mountain View Green Building Code (MVGBC; City of Mountain View, 2019) amendments, which include the Reach Code efforts. The MVGBC amends the State-mandated California Green Building Code (CALGreen) to include local green building standards and requirements for private development. The MVGBC applies green building requirements per building type and threshold to new construction, residential additions and commercial/industrial tenant improvements and includes energy efficiency standards that exceed the 2019 Building Energy Efficiency Standards.

All new structures in the City of Mountain View must comply with the mandatory measures of the 2019 California Green Building Standards Code as adopted by the state in addition to local amendments included in this code. This includes all residential new construction projects regardless of height or number of stories.

Section 8.20.9 of the MVGBC amends Subsection 101.10.1.1.3 of the 2019 California Green Building Standards Code as follows:

All multifamily residential new construction with three units or more must comply with the following:

- a. The mandatory measures of the 2019 California Green Building Standards Code and any Mountain View amendments;
- b. Demonstrate energy compliance to meet or exceed Title 24, Part 6;
- c. 15 percent of the parking spaces shall be equipped with EV2 chargers installed and one Level 3/DC Fast Charger shall be provided for every 100 spaces’
- d. Installation of photovoltaic (PV) panels on 50 percent of roof area (a project may submit for an exception by providing documentation that the required percentage of PV installation will over-generate the kWh required to operate the proposed structure on an annual basis);
- e. Space-conditioning equipment shall be electric, not be fueled by natural gas;
- f. Water-heating systems and equipment shall be electric or solar, not be fueled by natural gas;
- g. Clothes dryers shall be electric, not be fueled by natural gas; and
- h. Cooking appliances and fireplaces shall be electric, not fueled by natural gas.

Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to energy, as summarized below.

Green Building – Residential New Construction

The project is required to meet the mandatory measures of the California Green Building Standards Code and meet the intent of the applicable GreenPoint Rated points. All mandatory prerequisite points and minimum point totals per category to attain GreenPoint Rated status must be achieved, unless specific point substitutions or exceptions are approved by the Community Development Department. Formal project registration and certification through Build It Green is not required for compliance with the Mountain View Green Building Code (MVGBC). The project is also required to comply with Title 24, Part 6.

Transportation Demand Management (TDM) Program

The property owner, property manager(s), and homeowners association (HOA) or their representative(s) (collectively, “the owners”) are required to maintain a TDM program which provides commute and transportation alternatives to employees/residents of the project for the life of the project. The TDM program measures shall be formally accepted by the property owners prior to building permit issuance through a legal agreement or recorded document, as determined by the City Attorney, with contents to the satisfaction of the Zoning Administrator. The mandatory TDM measures for the project include:

- a. Join and maintain ongoing membership in the MVTMA for the life of the project.
- b. Provide and maintain maximum vehicle parking and minimum bike parking as approved in the project. Also must provide and/or maintain access to shared bicycles for residents/employees, if a bike-share service is not nearby.
- c. Provide conveniently located ride-share drop-off and waiting areas on-site.
- d. Provide and maintain shared, common, collaborative workspaces with WiFi for residents and their guests. This amenity can be offered in partnership with nearby residents and businesses.
- e. Provide monetary incentives for alternative mode of travel, such as subsidized transit passes or bike-share for residents and/or unbundled parking.
- f. Provide and maintain accessible and secure storage spaces for package delivery on-site.
- g. Provide local transportation information to all residents through a website, leasing office, and/or initial sale information.
- h. Support Safe Routes to Schools programs, including facilitating parent gatherings and coordination of walking, school buses, and/or bike trains.
- j. Other TDM measures as directed by the Planning Department.

4.5.4 Significance Criteria

The thresholds used to determine the significance of impacts related to energy are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

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

Approach to Analysis

This analysis considers the State CEQA Guidelines Appendix G thresholds, as described above, in determining whether the HEU's implementation would result in the inefficient, wasteful, or unnecessary use of energy. The evaluation is based on a review of regulations and determining their applicability to the HEU. As discussed earlier, there are several plans and policies at the federal, state and local levels to increase energy conservation and the use of renewable energy. Consistency of the HEU with these regulations would also ensure that the HEU would not result in the inefficient, wasteful, or unnecessary use of energy.

4.5.5 Impacts of the Project

Impact ENE-1: Implementation of the HEU would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (*Less than Significant*)

The project consists of updating the City’s HEU, and no actual development is proposed at this point that would produce environmental impacts. Implementation of the HEU would result in the development of housing required to meet the City’s RHNA allocation. Construction and operation of the housing facilitated by the HEU’s implementation and the rezoning of parcels to allow for greater densities than currently allowed would increase energy consumption within the City. Future development facilitated by the HEU would be subject to project-level environmental review and approval of permits prior to construction and operation of new housing.

Development of housing proposed under the HEU would consume energy during both construction and operation. Operational energy use would primarily include building energy use and transportation use, with a smaller contribution from area sources.

Construction Equipment and Vehicles

Energy use during future housing construction would primarily occur in association with fuel use in construction equipment and vehicles. Energy use would vary throughout the construction period of projects based on the construction activities being performed and would cease upon completion of construction. Fuels used for construction would typically include diesel and gasoline; use of natural gas and electricity would be minimal.

Heavy-duty equipment associated with construction during development allowed for by the HEU would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the individual construction sites and haul trucks exporting demolition material or other materials off site. Construction workers would travel to and from each of the parcels within the rezoning program throughout the duration of construction. Construction worker trips in light-duty vehicles would primarily be gasoline-powered.

All development proposed under the HEU would be subject to CARB’s In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements.

Construction activities would use fuel-efficient equipment consistent with federal and state regulations, such as fuel efficiency regulations in CARB’s Pavley Phase II standards; the anti-

idling regulation in 13 CCR Section 2485; and fuel requirements for stationary equipment in 17 CCR Section 93115 (concerning the Airborne Toxic Control Measures). In accordance with 13 CCR Sections 2485 and 2449, idling by commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of five minutes. The intent of these regulations is to reduce construction emissions; however, compliance with the anti-idling and emission reduction regulations discussed above would also result in fuel savings from the more efficient use of equipment.

The diesel and gasoline use for construction activities would be temporary and constitute a small fraction of the regional usage; therefore, the construction energy demand of the HEU would be within the supply and infrastructure service capabilities of PG&E and SVCE and would not require additional local or regional capacity.

Overall, construction activities that would be required as part of implementation of the HEU would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. Therefore, the HEU would not result in the inefficient, wasteful, or unnecessary consumption of energy during construction. Therefore, impacts would be less than significant, and no mitigation is required.

Operational Building Efficiency

Future housing development would require electricity for building operation (e.g., appliances, lighting, air conditioning, space and water heating). Consistent with the City's Reach Codes, all development under the HEU would be required to be all-electric with no natural gas infrastructure, which eliminates natural gas usage onsite. While this would increase the electricity use associated with the development as compared to development with both electricity and natural gas usage, the increasing percentage of electricity from renewable sources provided by PG&E and SVCE in response to RPS standards would result in a transition from the use of non-renewable energy to cleaner, renewable energy sources (see RPS program described above in Section 4.5.3, *Regulatory Setting*). Provision of EV charging infrastructure as required by the City's Reach Codes and Mitigation Measure GHG-1 would also increase electricity use. The Reach Codes also include onsite photovoltaic requirements for residential developments which would offset part of this increase, encourage use of renewable solar energy and reduce reliance on the grid.

Prior to development at individual parcel sites, applicants would be required to ensure that proposed development would meet Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Title 24 reduces energy use in residential and commercial buildings through progressive updates to both the Green Building Standards Code (Title 24, Part 11) and the Energy Efficiency Standards (Title 24, Part 6). Title 24 standards are updated periodically (every 3 years). Provisions added to Title 24 over the years include consideration and incorporation of new energy efficiency technologies and methods for building features such as space conditioning, water heating, and lighting, as well as construction waste diversion goals. Additionally, some standards focus on larger energy-saving concepts such as

reducing loads at peak periods and seasons, improving the quality of energy-saving installations, and performing energy system inspections.

Past updates to the Title 24 standards have proven very effective in reducing building energy use; the 2013 update to the energy efficiency standards was estimated to reduce energy consumption in residential buildings by 25 percent relative to the 2008 standards (CEC, 2012). The current 2019 Title 24 standards further reduce energy use compared to the 2016 standards, with single-family residential savings of 79 percent for electricity and 9 percent for natural gas. For low-rise multi-family buildings, savings are 79 percent for electricity and 5 percent for natural gas by requiring photovoltaic (PV) systems for new low-rise residential buildings under three stories (CEC, 2018b).

Implementation of housing proposed under the HEU would occur between 2023 and 2040. Thus, further energy use reductions beyond the current 2019 standards can be anticipated from future Title 24 code revision cycles, as building permits are issued at future dates corresponding to those code updates. Goals and policies encouraged by the City, including those set forth in the City's General Plan also support increased energy conservation in new development, such as that which would occur under the HEU. These requirements would decrease the amount of energy required for building operation and ensure that building energy use related to development facilitated by the HEU would not be inefficient or wasteful.

In addition, as part of the RPS program detailed earlier, electric utilities including investor-owned utilities and community choice aggregators are required to increase the percentage of electricity provided from renewable resources. Though the RPS program does not necessarily increase energy efficiency, implementation of this program reduces use of non-renewable energy sources. The legislation requires utilities to increase the percentage of electricity obtained from renewable sources to 33 percent by 2020 and 50 percent by 2030. SB 100 furthered these standards to require electric utilities to procure eligible renewable electricity for 44 percent of retail sales by 2024, 52 percent by 2027, and 60 percent by December 2030. SB 100 also specifies that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. CPUC and the CEC jointly implement the RPS program and PG&E and SVCE, electric utility providers to Mountain View are required to adhere to these standards and deadlines. Therefore, housing developed as part of the HEU would be consistent with these regulations.

Transportation

Vehicle trips generated by housing developed pursuant to the HEU would increase use of transportation fuels, primarily gasoline and diesel. Enhanced fuel economies realized pursuant to federal and state regulatory actions such as increasingly stringent CAFE/Pavley standards for vehicle fuel efficiency, and transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would decrease future gasoline fuel demands per VMT. Additionally, the location of the parcels identified for development by the HEU within priority development areas proximate to existing development served by urban services reduces VMT within the region, acting to also reduce regional vehicle energy demands. Furthermore, approval of the HEU itself, as a policy document update, would not change these regulations and would

not provide any goals, policies, or programs that would result in transportation energy consumption. Therefore, transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and the HEU would be consistent with regulations to reduce transportation energy use.

Considering these requirements, energy use associated with the construction and operation of housing facilitated by the HEU would not be considered unnecessary and wasteful and would be consistent with all applicable plans, policies and regulations developed to encourage energy conservation and renewable energy use. Therefore, impacts would be **less than significant**.

In addition, Mitigation Measure AIR-1b, presented in Section 4.2, *Air Quality*, of this EIR requires the use of cleaner construction equipment meeting the U.S. EPA's Tier 4 Final standards if subsequent projects proposed as part of the HEU are found to generate construction emissions in excess of the BAAQMD's project-level construction thresholds. Newer equipment meeting the Tier 4 Final standards would also be energy efficient when compared to older equipment, which would further reduce energy use during construction.

Mitigation: None required.

4.5.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to energy could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

Cumulative impacts of the HEU related to the wasteful, inefficient, or unnecessary consumption of energy during construction and operation and the potential to conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards would be the same as discussed under Impact ENE-1. Energy consumption effects related to individual projects are localized and would not combine with similar effects in other locations. However, continued growth in the City of Mountain View and throughout PG&E and SVCE's service areas could contribute to ongoing increases in demand for electricity and natural gas.

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

The HEU, in conjunction with cumulative development in the City, would increase housing in an already developed area and result in increased energy consumption. Potential impacts to energy resources from future housing development that is facilitated by the HEU would be site-specific and would require applications for development permits that would be evaluated on a case-by-case basis. Each cumulative project would require separate discretionary approval and evaluation

under CEQA, which would address potential energy consumption impacts, if any, and identify necessary mitigation measures, where appropriate. Additionally, any future housing development facilitated by the HEU would be subject to compliance with all federal, state, and local requirements for energy efficiency, including the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6), the CALGreen Code (CCR Title 24, Part 11), and SB 743. Consequently, future housing development facilitated by the HEU would not result in significant environmental impacts from the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the HEU’s contribution to the cumulative energy impact would be **less than significant**.

Mitigation: None required.

4.5.7 Summary of Energy Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact ENE-1: Implementation of the HEU would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None required	-
Impact ENE-1.CU: Implementation of the HEU would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction and operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	None required	-

4.5.8 References

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4.6 Geology, Soils, and Paleontological Resources

4.6.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on geology, soils, and paleontological resources. This section first includes a description of the existing environmental setting as it relates to geology, soils, and paleontological resources, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on geology, soil, and paleontological resources.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to geology, soils, or paleontological resources were received during the NOP comment period.

4.6.2 Environmental Setting

Regional and Local Geology

Geologic mapping by Dibblee and Minch (2007) indicates that the geologic deposits that occur within the City of Mountain View (City) are entirely various types of Holocene-age alluvial deposits (Dibblee & Minch, 2007).

Soils

Expansive Soil

Expansive soils are soils that possess a “shrink-swell” characteristic, also referred to as linear extensibility. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying; the volume change is reported as a percent change for the whole soil. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater.¹ This cyclical change in soil volume is measured using the coefficient of linear extensibility (COLE) (NRCS, 2017). The Natural Resources Conservation Service (NRCS) relies on linear extensibility measurements to determine the shrink-swell potential of soils. If the linear extensibility percent is more than 3 percent (COLE=0.03), shrinking and swelling may cause damage to building, roads, and other structures (NRCS, 2017). Structural damage may occur incrementally over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

Soil expansion generally occurs in fine-grained clayey sediments, which could be present within the City. The NRCS Web Soil Survey data is generally useful at a large scale (meaning when evaluating an area in more detail). As such, Web Soil Survey expansive soil data is not available at a regional scale. The varying geology of the area is indicative of varying soil conditions across

¹ Perched groundwater is a local saturated zone above the water table that typically exists above an impervious layer (such as clay) of limited extent.

the City. As discussed above, expansive soils generally occur in fine-grained clayey sediments, which could be present throughout the City. Although, according to geologic mapping, the North Bayshore neighborhood area is very likely to contain these types of sediments (Dibblee & Minch, 2007).

Geologic Hazards

Faulting

There are no Holocene-active² faults within the City of Mountain View (City). There are four pre-Holocene³ faults that occur within the City: the Cascade, Palo Alto, San Jose, and Stanford faults. While there are no Holocene-active faults within the City, the Monte Vista-Shannon and the San Andreas fault zones are in proximity to the City—approximately 1 mile and 5 miles southeast of the City, respectively. The Monte Vista-Shannon and San Andreas fault zones have had recent movement and are likely sources of future ground shaking.

Surface Fault Rupture

The State Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) prohibits the development of structures for human occupancy across active fault traces. Under this Act, the California Geological Survey (CGS) has established “Zones of Required Investigation” on either side of an active fault that delimits areas susceptible to surface fault rupture. The zones are referred to as Earthquake Fault Zones (EFZs) and are shown on official maps published by the CGS. Surface rupture occurs when the ground surface is broken due to a fault movement during an earthquake; typically, these types of hazards occur within 50 feet of an active fault.

As discussed above, there are no Holocene-active faults within the City, and therefore, there are no EFZs within the City (CGS, 2022).

Seismic Ground Shaking

Ground shaking occurs due to a seismic event and can cause extensive damage to life and property and may affect areas hundreds of miles away from the earthquake’s epicenter. The extent of the damage varies by event and is determined by several factors, including (but not limited to) magnitude and depth of the earthquake, distance from epicenter, duration and intensity of the shaking, underlying soil and rock types, and integrity of structures.

The entire San Francisco Bay Area, including the City, could be subject to strong groundshaking during earthquakes. The 2014 Working Group on California Earthquake Probabilities (WGCEP)⁴ concluded that there is a 72 percent probability that a magnitude (M_w) 6.7 earthquake or higher could occur in the San Francisco Bay Area over the next 30 years (WGCEP, 2015).

² Holocene-active faults show evidence of displacement within the Holocene Epoch, or the last 11,700 years are considered active (CGS 2008).

³ Pre-Holocene faults have not shown evidence of displacement in the last 11,700 years (CGS 2008).

⁴ Also referred to as WGCEP 2014, this is a working group comprised of seismologists from the U.S. Geological Survey (USGS), California Geological Survey (CGS), Southern California Earthquake Center (SCEC), and California Earthquake Authority (CEA).

Liquefaction and Lateral Spreading

Liquefaction is a phenomenon in which unconsolidated, water saturated sediments become unstable due to the effects of strong seismic shaking. During an earthquake, these sediments can behave like a liquid, potentially causing severe damage to overlying structures. Lateral spreading is a variety of minor landslide that occurs when unconsolidated liquefiable material breaks and spreads due to the effects of gravity, usually down gentle slopes. Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil.

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of deep foundations due to ground settlement. Dynamic settlement (i.e., pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 50 feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

According to the EQ Zapp, the City is almost entirely within an established liquefaction zone (CGS, 2022).

Landslides

Landslides are one of the various types of downslope movements in which rock, soil, and other debris are displaced due to the effects of gravity. The potential for material to detach and move down slope depends on multiple factors including the type of material, water content, and steepness of terrain. Generally, earthquake-induced landslides occur within deposits of a moderate to high landslide potential when ground shaking triggers slope failures during or as a result of a nearby earthquake.

The urbanized, developed areas of the City have a very low landslide potential due to the relatively flat topography and lack of slopes and hills. According to the EQ Zapp, the City is not within any established earthquake-induced landslide zones (CGS, 2022). Additionally, there are no historic landslides mapped within the City (Dibblee & Minch, 2007).

Paleontological Resources

Paleontological resources are the mineralized (fossilized) remains of prehistoric plants and animals, including body fossils, such as bones, bark or wood, and shell, as well as trace fossils, such as shell, leaf, skin, or feather impressions, footprints, burrows, or other evidence of an organism's life or activity. These resources are located within sedimentary rocks or alluvium and are considered to be nonrenewable.

The Society of Vertebrate Paleontology (SVP) has established standard guidelines that outline professional protocols and practices for conducting paleontological resource assessments and

surveys; monitoring and mitigation; data and fossil recovery; sampling procedures; and specimen preparation, identification, analysis, and curation (SVP, 2010). Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as provided in its standard guidelines.

The SVP (SVP, 2010: 11) defines a significant fossil resource as:

fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

Based on the significance definitions of SVP (2010), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely would a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment,⁵ and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

Paleontological sensitivity is defined as the potential for a geologic formation to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Non-renewable Paleontologic Resources*, the SVP (2010:1–2) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

- **High Potential:** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources.
- **Low Potential:** Rock units that are poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule.
- **Undetermined Potential:** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment.
- **No Potential:** Rock units like high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites) that will not preserve fossil resources.

⁵ A paleoenvironment is the past environment of an area during a given time period in the past.

As indicated by geologic mapping, the surficial geology within the planning area is composed of Holocene-age alluvial deposits (Dibblee & Minch, 2007)

As discussed, in general, Holocene-age alluvial deposits are considered to have a low potential to contain significant paleontological resources, based on the relatively recent age of the deposits (SVP, 2010); the youngest Holocene-age deposits (i.e., younger than 5,000 radiocarbon years) have a particularly low potential. Deposits that date to the middle Holocene (i.e., older than 5,000 radiocarbon years) have a potential that increases as the depth into the deposits increases.

A record search of the University of California Museum of Paleontology (UCMP) online fossil locality database indicates that there have been no previously recorded vertebrate fossil localities within Holocene-age sediments (UCMP, 2022). There are records of 5 localities from Holocene-age deposits from Santa Clara County; there are 2 invertebrate localities, one locality with plant fossils and microfossils, and 2 others that are unlabeled (UCMP, 2022).

In summary, the surficial Holocene-age alluvial deposits are considered to have a low potential to contain significant paleontological resources, with the potential increasing to high within the deeper layers of the unit. The more urban areas of the City are underlain by highly disturbed fill; the surficial materials would have a very low potential for paleontological resources.

4.6.3 Regulatory Setting

Federal

Clean Water Act

The federal Clean Water Act (CWA) and subsequent amendments, under the enforcement authority of the U.S. Environmental Protection Agency (USEPA), was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The purpose of the CWA is to protect and maintain the quality and integrity of the nation’s waters by requiring states to develop and implement state water plans and policies. The CWA gave the USEPA the authority to implement pollution control programs such as setting wastewater standards for industry. In California, implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) program is conducted through the California State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The CWA also sets water quality standards for surface waters and established the NPDES program to protect water quality through various sections of the CWA, including Sections 401 through 404 and 303(d) that are implemented and regulated by the SWRCB and the nine RWQCBs. Section 402 of the CWA would apply to the Project because construction at the housing sites would be required to control discharges of pollutants from point sources, as discussed below.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to protect structures for human occupancy from the hazard of surface faulting. In accordance with the act, the State

Geologist has established regulatory zones—called earthquake fault zones—around the surface traces of active faults and has published maps showing these zones. Buildings for human occupancy cannot be constructed across surface traces of faults that are determined to be active. Because many active faults are complex and consist of more than one branch that may experience ground surface rupture, earthquake fault zones extend approximately 200 to 500 feet on either side of the mapped fault trace.

California Building Code

The California Building Code (CBC), which is codified in Title 24 of the California Code of Regulations, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress to facilities (entering and exiting), and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The 2019 edition of the CBC is based on the 2018 International Building Code (IBC) published by the International Code Council, which replaced the Uniform Building Code (UBC). The code is updated triennially, and the 2019 edition of the CBC was published by the California Building Standards Commission on July 1, 2019, and took effect starting January 1, 2020. The 2019 CBC contains California amendments based on the American Society of Civil Engineers (ASCE) Minimum Design Standard ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures, provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. The prescribed lateral forces are generally smaller than the actual peak forces that would be associated with a major earthquake. Consequently, structures should be able to (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some nonstructural damage; and (3) resist major earthquakes without collapse, but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, it is reasonable to expect that a structure designed in accordance with the seismic requirements of the CBC should not collapse in a major earthquake.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a seismic design category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site; SDC ranges from A (very small seismic vulnerability) to E/F (very high seismic vulnerability and near a major

fault). Seismic design specifications are determined according to the SDC in accordance with CBC Chapter 16. CBC Chapter 18 covers the requirements of geotechnical investigations (Section 1803), excavation, grading, and fills (Section 1804), load-bearing of soils (Section 1806), as well as foundations (Section 1808), shallow foundations (Section 1809), and deep foundations (Section 1810). For Seismic Design Categories D, E, and F, Chapter 18 requires analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil-bearing capacity. It also addresses measures to be considered in structural design, which may include ground stabilization, selecting appropriate foundation type and depths, selecting appropriate structural systems to accommodate anticipated displacements, or any combination of these measures. The potential for liquefaction and soil strength loss must be evaluated for site-specific peak ground acceleration magnitudes and source characteristics consistent with the design earthquake ground motions.

Requirements for geotechnical investigations are included in Appendix J, CBC Section J104, Engineered Grading Requirements. As outlined in Section J104, applications for a grading permit are required to be accompanied by plans, specifications, and supporting data consisting of a soils engineering report and engineering geology report. Additional requirements for subdivisions requiring tentative and final maps and for other specified types of structures are in California Health and Safety Code Sections 17953 to 17955 and in 2013 CBC Section 1802. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

The design of the proposed homes and associated infrastructure would be required to comply with CBC requirements, which would make the Project consistent with the CBC.

Municipal Separate Stormwater System (MS4s)

As discussed, the Clean Water Act mandates controls on discharges from municipal separate storm sewer systems (MS4s). Acting under the Federal mandate and the California Water Code, California Water Boards require cities, towns, and counties to regulate activities that may result in pollutants entering storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use BMPs to minimize the amount of pollutants in runoff. To enforce prohibitions and to promote the use of BMPs, the municipalities inspect businesses and construction sites, conduct public education and outreach, sweep streets, and clean storm drains. In addition, municipalities actively support projects to assess, monitor, and restore local creeks and wetlands.

National Pollutant Discharge Elimination System (NPDES) Construction General Permit

Construction associated with the Project would disturb more than one acre of land surface affecting the quality of stormwater discharges into waters of the U.S. The Project would, therefore, be subject to the *NPDES General Permit for Stormwater Discharges Associated with*

Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb one acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management “housekeeping;”
- Non-stormwater management;
- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical

monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

In the Project area, the Construction General Permit is implemented and enforced by the San Francisco Bay Regional Water Quality Control Board, which administers the stormwater permitting program. Dischargers must electronically submit a notice of intent and permit registration documents to obtain coverage under this Construction General Permit. Dischargers are to notify the San Francisco Bay Regional Water Quality Control Board of violations or incidents of non-compliance, and submit annual reports identifying deficiencies in the BMPs and explaining how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer, and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A legally responsible person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

Public Resources Code Section 5097.5 and Section 30244

State requirements for management of paleontological resources are included in Public Resources Code (PRC) Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts on paleontological resources from developments on public (state, county, city, district) lands.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. For projects that would locate structures for human occupancy within designated Zones of Required Investigation, the Seismic Hazards Mapping Act requires project applicants to perform a site-specific geotechnical investigation to identify the potential site-specific seismic hazards and corrective measures, as appropriate, prior to receiving building permits. The CGS Guidelines for Evaluating and Mitigating Seismic Hazards (Special Publication 117A) provides guidance for evaluating and mitigating seismic hazards (CGS 2008).

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Land Use and Design and Public Safety Elements of the General Plan includes the following policies related to geology, soils, and paleontological resources (City of Mountain View, 2021).

Goal LUD-11: Preserved and protected and important historic and cultural resources.

Policy LUD-11.5: Archeological and paleontological site protection. Require all new development to meet state codes regarding the identification and protection of archeological and paleontological sites.

Goal PSA-5: The Protection of life and property from seismic hazards.

Policy PSA-5.1: New development. Ensure new development addresses seismically induced geologic hazards.

Policy PSA-5.2: Alquist-Priolo zones. Development shall comply with the Alquist-Priolo Earthquake Fault Zoning Act.

Policy PSA-5.4: Utility Design. Ensure new underground utilities, particularly water and natural gas lines, are designed to meet current seismic standards.

Ordinances

Chapter 8 of the City Code of Ordinances requires adherence to the CBC, 2019 edition, which incorporates, by adoption, the 2015 edition of the IBC of the International Code Council, with California amendments. This code specifies designs for structural integrity, including in a seismically active area.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (as of October 25, 2021). For all construction activities, the City has standard conditions relating to geology, soils, and paleontological resources, as summarized below.

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 Sediment and Erosion Control Plan

The applicant shall submit a written plan acceptable to the City which shows controls that will be used at the site to minimize sediment runoff and erosion during storm events. The plan should 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 should also include routine street sweeping and storm drain catch basin cleaning.

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 (CGS) Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act. The report will be submitted to the City during building plan check, and the recommendations made in the geotechnical report will be implemented as part of the project and included in building permit drawings and civil drawings as needed. 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; method for backdraining walls to prevent the build-up of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design.

Discovery of Paleontological Resources

In the event that a fossil is discovered during construction of the project, excavations within 50' 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.

Soils Report

As required by the State Seismic Hazards Mapping Act, a project site-specific geotechnical investigation shall be conducted by a registered soils/geologist identifying any seismic hazards and recommending mitigation measures to be taken by the project. The applicant, through the applicant's registered soils engineer/geologist, shall certify the project complies with the requirements of the State Seismic Hazards Mapping Act. Indicate the location (page number) within the geotechnical report of where this certification is located, or provide a separate letter stating such.

4.6.4 Significance Criteria

The thresholds used to determine the significance of impacts related to geology, soil, and paleontological resources are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42;

- ii) Strong seismic ground shaking;
 - iii) Seismic-related ground failure, including liquefaction; or
 - iv) Landslides.
- Result in substantial soil erosion or the loss of topsoil.
 - 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.
 - Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
 - Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
 - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Approach to Analysis

This environmental analysis of the potential impacts related to geology, soils, and paleontological and mineral resources is based on a review of the results of the review of literature and database research (geologic, seismic, and soils, and paleontological resources reports and maps), and the Mountain View 2030 General Plan.

The Project would be regulated by the various laws, regulations, and policies summarized above in Section 4.7.3, *Regulatory Setting*. Compliance by the Project with applicable federal, state, and local laws and regulations is assumed in this analysis and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

After considering the implementation of the Project described in Chapter 3, *Project Description*, and compliance with the required regulatory requirements, the environmental analysis below identifies if the defined significance thresholds are exceeded and, therefore, a significant impact would occur. For those impacts considered to be significant, mitigation measures are proposed to the extent feasible to reduce the identified impacts.

The structural elements of the Project would undergo appropriate design-level geotechnical evaluations prior to final design and construction. Implementing the regulatory requirements in the CBC and City ordinances and ensuring that all buildings and structures constructed in compliance with the law is the responsibility of the Project engineers and building officials. The geotechnical engineer, as a registered professional with the State of California, is required to comply with the CBC and local codes while applying standard engineering practice and the appropriate standard of care for the particular region in California, which, in the case of the

Project, is Santa Clara County.⁶ The California Professional Engineers Act (Building and Professions Code Sections 6700-6799), and the Codes of Professional Conduct, as administered by the California Board of Professional Engineers and Land Surveyors, provides the basis for regulating and enforcing engineering practice in California. The local Building Officials are typically with the local jurisdiction and are responsible for inspections and ensuring CBC compliance prior to approval of the building permit.

Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Location on an active fault.** As discussed in Section 4.7.2, *Environmental Setting, Faulting*, none of the proposed housing sites are located on an active fault. Therefore, this significance criterion is not applicable to the project and is not discussed further.
- **Septic tanks or alternative waste water disposal systems.** As discussed in Section 3.5.2, *Housing Sites Inventory*, all sites must have access to existing or planned water, sewer, and other dry utilities with sufficient capacity available to support housing development. Therefore, this significance criterion is not applicable to the project and is not discussed further.

4.6.5 Impacts of the Project

Impact GEO-1: Implementation of the HEU 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 or strong seismic ground shaking. (*Less than Significant*)

There are no Holocene-active faults within the City; however, there are three pre-Holocene faults within the City. Additionally, the Holocene-active Monte Vista-Shannon and San Andreas fault zones are in proximity to the City, and are likely sources for strong seismic ground shaking in the event of an earthquake from either of these fault zones. Due to the proximity to the Monte Vista-Shannon and San Andreas fault zones, new developments proposed under the HEU would be subject to strong seismic ground shaking in the event of an earthquake originating from one of the previously mentioned fault zones. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the magnitude, the duration of shaking, and the nature of the geologic materials on which the Project components would be constructed. Intense groundshaking and high ground accelerations would affect the entire City, including the proposed houses, foundations, and associated utilities. The primary and secondary effects of groundshaking and seismically induced ground failures such as landslides could damage structural foundations, distort or break pipelines, and place people at risk of injury or death. Strong seismic ground shaking has historically caused damage, injury, and loss of life; these hazards could potentially result in damage to new developments, resulting in loss, injury, or death.

⁶ A geotechnical engineer (GE) specializes in structural behavior of soil and rocks. GEs conduct soil investigations, determine soil and rock characteristics, provide input to structural engineers, and provide recommendations to address problematic soils.

As required by California law and the City's Standard Condition of Approval for a Geotechnical Report, any new developments would be subject to the seismic design criteria of the California Building Code (CBC), which require that all improvements be constructed to withstand anticipated ground shaking from regional fault sources. Each new development would be required to obtain a site-specific geotechnical report prior to the issuance of individual grading permits; each new development would be required to retain a licensed geotechnical engineer to design new structures to withstand probable seismically induced ground shaking. The CBC standards and City codes require all new developments to be designed consistent with a site-specific, design-level geotechnical report, which would be fully compliant with the seismic recommendations of a California-registered professional geotechnical engineer. Adherence to Standard Condition of Approval (Geotechnical Report) the applicable CBC requirements and City codes would ensure that the proposed Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. The impact would be **less than significant**.

Mitigation: None required.

Impact GEO-2: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. (*Less than Significant*)

Based on the available data (i.e., geologic mapping and liquefaction susceptibility mapping), any new development under the HEU could be subject to moderate soil liquefaction, depending on the soil conditions at the particular site. New developments under the proposed Project could be subjected to the damaging effects of liquefaction in the event of an earthquake in the region.

As required by California law and the Standard Conditions of Approval for a Geotechnical Report and a Soils Report, any new developments would be subject to the seismic design criteria of the CBC and City building codes, which require that all improvements be constructed to withstand any anticipated seismic-related ground failures, including liquefaction and lateral spreading, due to ground shaking from an earthquake. Each new development would be required to obtain a site-specific geotechnical report prior to the issuance of individual grading permits; each new development would be required to retain a licensed geotechnical engineer to investigate and evaluate each new development site and design new structures to withstand probable seismic-related ground failures, such as liquefaction and lateral spreading. The CBC standards and City codes require all new developments to be designed consistent with a site-specific, design-level geotechnical report, which would be fully compliant with the seismic recommendations of a California-registered professional geotechnical engineer. Liquefaction hazards can generally be addressed through site preparation measures or foundation design measures such as removal and replacement of liquefiable soils, densification of these soils, or specific foundation design recommendations. Implementation of these measures in accordance with building code requirements can effectively reduce the hazard to minimize any potential for substantive damage.

Compliance with Standard Condition of Approval (Geotechnical Report) and Standard Condition of Approval (Soils Report), and all applicable CBC and City Code requirements would ensure that the proposed Project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, impacts would be **less than significant**.

Mitigation: None required.

Impact GEO-3: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. (*Less than Significant*)

As discussed, the City is mostly urbanized and developed, the area is relatively flat with minimal slopes and hillsides. While the landslide potential is low, Standard Condition of Approval (Geotechnical Report) and Standard Condition of Approval (Soils Report) would still be required. Each specific final, design-level geotechnical report would include specific design requirements that would inform the structural and geotechnical engineering as it related to slope stability, as required by the CBC and City codes. Implementation of these geotechnical design requirements can effectively reduce any potential hazard associated with earthquake-induced landslides.

Compliance with Standard Condition of Approval (Geotechnical Report) and Standard Condition of Approval (Soils Report), the CBC, and City code requirements, including implementation of recommendations provided in site-specific geotechnical reports would reduce or avoid impacts related to landslides. Project construction would not directly or indirectly result in adverse effects related to landslides, and the impact would be **less than significant**.

Mitigation: None required.

Impact GEO-4: Implementation of the HEU would not result in substantial soil erosion or the loss of topsoil. (*Less than Significant*)

New developments under the HEU would include ground disturbance activities, such as grading, grubbing, or mass excavation that could contribute to substantial soil erosion or the loss of topsoil. Any new development that would require the disturbance of one or more acres during construction would be subject to the requirements of the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Construction General Permit), discussed in Section 4.7.3, *Regulatory Setting, Construction General Permit*. The Construction General Permit requires the preparation and implementation of a SWPPP, which would include BMPs designed to control and reduce soil erosion. The BMPs may include dewatering procedures, storm water runoff quality control measures, watering for dust control, and the construction of silt fences, as needed. Additionally, Standard Conditions of Approval for the State of California Construction General Stormwater Permit and Construction Sediment and Erosion Control Plan would also be required. These standard conditions of approval would

include specific measures to reduce the amount of soil erosion as a result of construction activities.

Once constructed and as discussed above in Section 4.7.3, *Regulatory Setting, Municipal Separate Storm Sewer Systems (MS4s)*, the MS4 permit and City codes would require that the design of Projects include recommendations for managing runoff from completed projects to reduce the potential for erosion that could result in ground failures.

Compliance with applicable City standard conditions of approval and the independently enforceable existing requirement to control runoff would ensure that impacts related to erosion and soil loss would be **less than significant**.

Mitigation: None required.

Impact GEO-5: Implementation of the HEU 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. (*Less than Significant*)

As discussed above, areas within the City could be subject to the potential effects of unstable soils. Any new developments that are proposed in areas determined to be susceptible to unstable geologic or soil conditions would be subject to the damaging effects of these hazards.

As previously discussed above in Impacts GEO-1, GEO-2, and GEO-3, all new developments would be subject to the requirements of applicable City standard conditions of approval, the CBC, and City building codes, which would include conducting geotechnical investigations to analyze potential unstable soil conditions at a site. If unstable soil conditions are determined to be present at a given site, the geotechnical report specific to that site would include site-specific design requirements to implement to reduce or avoid adverse effects associated with unstable soils.

Compliance with applicable City standard conditions of approval, the CBC, and City code requirements, including implementation of recommendations provided in site-specific geotechnical reports would reduce or avoid impacts related to unstable soils to **less than significant**.

Mitigation: None required.

Impact GEO-6: Implementation of the HEU would not be located on expansive soil, creating substantial direct or indirect risks to life or property. (*Less than Significant*)

As discussed, soil expansion generally occurs in fine-grained clayey sediments, which could be present in the City—particularly in the North Bayshore neighborhood area. Analysis of expansive soils is standard during geotechnical investigations, as the CBC outlines specific soil engineering

parameters to identify and mitigate for expansive soils. If expansive soils are detected during the geotechnical investigation, further laboratory testing would be required to determine the nature and extent of the affected soils, followed by recommendations to remove, or treat the expansive soils.

Compliance with Standard Condition of Approval (Geotechnical Report) and Standard Condition of Approval (Soils Report), the CBC, and City codes requirement to determine the potential for expansive soils for each individual new development under the proposed Project would ensure that all problematic soils are identified, and soil engineering requirements are implemented. Soil engineering is used to adjust the existing problematic properties of certain soils so that they are suitable for new developments. Adherence to the requirements of the applicable City standard conditions of approval, the CBC, and City codes, and geotechnical investigation would avoid impacts resulting from potentially expansive soils. Compliance with CBC and City code requirements, including implementation of recommendations provided in site-specific geotechnical reports would reduce or avoid impacts related to expansive soils and impacts would be **less than significant**.

Mitigation: None required.

Impact GEO-7: Implementation of the HEU would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (*Less than Significant with Mitigation*)

Geologic mapping indicates that the surficial deposits within the City are composed of Holocene-age alluvial deposits. The Holocene-age alluvium has a low potential to contain significant paleontological resources near the surface, but the potential increases in the deeper, older layers of these deposits. A review of the UCMP online fossil localities database indicates that there are no recorded vertebrate fossil localities within Holocene-age sediments from Santa Clara County. Although, there are records of invertebrates, plant, and microfossils from Santa Clara County.

The addition of new developments under the HEU would require grading and excavation during the construction phases of housing projects. While Holocene-age alluvial deposits are considered to have a low potential to contain significant paleontological resources near the surface, paleontological resources may be encountered in deeper excavations (generally, approximately 6 or more feet bgs, depending on site-specific information) into previously undisturbed Holocene-age alluvium. If significant paleontological resources are encountered and inadvertently destroyed during construction of new developments, that would constitute a potentially significant impact.

To ensure potential impacts to significant paleontological resources are less than significant, the Standard Condition of Approval for Discovery of Paleontological Resources would be required in the event of a fossil discovery during construction to ensure that construction is halted, and a qualified paleontologist assesses the find to determine its significance. Implementation of this Standard Condition of Approval (Discovery of Paleontological Resources) would reduce the

potential impacts to significant planetological resources if they are encountered during construction. The impact would be **less than significant**.

Mitigation: None required.

4.6.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to geology, soils, and paleontological resources could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on geology, soils, and paleontological resources is Citywide.

Impact GEO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on geology, soils, or paleontological resources. (*Less than Significant*)

Seismically induced groundshaking, liquefaction and lateral spreading, and expansive soils could cause structural damage or pipeline leaks or ruptures. Inadequate design of stormwater control features could result in erosion.

Standard Conditions of Approval for the State of California Construction General Stormwater Permit and Construction Sediment and Erosion Control Plan would be required. The state Construction General Permit would require each project to prepare and implement a SWPPP. The SWPPPs would describe BMPs to control runoff and prevent erosion for each project. Through compliance with this requirement, the potential for erosion impacts would be reduced. The Construction General Permit has been developed to address cumulative conditions arising from construction throughout the state, and is intended to maintain cumulative effects of projects subject to this requirement below levels that would be considered significant. For example, two adjacent construction sites would be required to implement BMPs to reduce and control the release of sediment and/or other pollutants in any runoff leaving their respective sites. The runoff water from both sites would be required to achieve the same action levels, measured as a maximum amount of sediment or pollutant allowed per unit volume of runoff water. Thus, even if the runoff waters were to combine after leaving the sites, the sediments and/or pollutants in the combined runoff would still be at concentrations (amount of sediment or pollutants per volume of runoff water) below action levels and would not be cumulatively considerable (**less than significant**).

Standard Conditions of Approval Geotechnical Report and Soils Report would be required. State and local building regulations and standards, described in the Section 4.7.3, Regulatory Setting, have been established to address seismic and unstable geologic unit and soils conditions. The Project and cumulative projects would be required to comply with applicable provisions of the

CBC and City codes. Through compliance with these requirements, the potential for impacts would be reduced. As explained in the Regulatory Framework, the purpose of the CBC and City codes is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction; by design, it is intended to reduce the cumulative risks from buildings and structures. Therefore, based on compliance with these requirements, the incremental impacts of the Project combined with impacts of other projects in the area would not cause a significant cumulative impact related to seismically induced groundshaking, liquefaction and lateral spreading, expansive soils, or erosion, and the Project’s contribution to cumulative effects would not be cumulatively considerable and this impact would be **less than significant**.

Standard Condition of Approval Discovery of Paleontological Resources would be required. Additionally, as other cumulative project would also undergo a CEQA analysis, it would be determined at the time of analysis if an area has the potential to contain significant paleontological resources. As such, other cumulative projects would be subject to the same SCA as the Project and/or project-specific mitigation measures. As the HEU and other projects happening simultaneously would be subject to project-specific mitigation measures designed to protect significant paleontological resources, the Project would not cause or contribute to a cumulative considerable impact and would be **less than significant**.

Mitigation: None required.

4.6.7 Summary of Geology, Soils, and Paleontological Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact GEO-1: Implementation of the HEU 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 or strong seismic ground shaking.	Less than Significant	None required	-
Impact GEO-2: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	Less than Significant	None required	-
Impact GEO-3: Implementation of the HEU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	Less than Significant	None required	-
Impact GEO-4: Implementation of the HEU would not result in substantial soil erosion or the loss of topsoil.	Less than Significant	None required	-

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact GEO-5: Implementation of the HEU 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.	Less than Significant	None required	-
Impact GEO-6: Implementation of the HEU would not be located on expansive soil, creating substantial direct or indirect risks to life or property.	Less than Significant	None required	-
Impact GEO-7: Implementation of the HEU would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant	None required	-
Impact GEO-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on geology, soils, or paleontological resources.	Less than Significant	None required	-

4.6.8 References

California Geological Survey (CGS), 2008. Special Publication 117A - Guidelines for Evaluating and Mitigating Seismic Hazards in California.

City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021.

Natural Resources Conservation Service (NRCS), 2017. Title - National Soil Survey Handbook. Part 618 – Soil Properties and Qualities. Section 618.41, Linear Extensibility Percent.

Society of Vertebrate Paleontology (SVP), 2010. Society of Vertebrate Paleontology (SVP), 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Prepared by: SVP Impact Mitigation Guidelines Revision Committee.

University of California Museum of Paleontology (UCMP), 2022a. UC Museum of Paleontology Localities database. Fossil localities within Santa Clara County.

Working Group on California Earthquake Probabilities (WGCEP), 2015a. *UCERF3: A new earthquake forecast for California’s complex fault system*: U.S. Geological Survey Fact Sheet 2015–3009, March

4.7 Greenhouse Gas Emissions

4.7.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on greenhouse gases (GHGs). This section first includes a description of the existing environmental setting as it relates to GHGs and climate change, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project's GHG emissions on the environment.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to GHG emissions were received during the NOP comment period.

4.7.2 Environmental Setting

Climate Science

“Global warming” and “climate change” are common terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century. Natural processes and human actions have been identified as affecting the climate. The Intergovernmental Panel on Climate Change (IPCC) has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward.

However, increasing GHG concentrations resulting from human activity since the 19th century, such as fossil fuel combustion, deforestation, and other activities, are believed to be a major factor in climate change. GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space—a phenomenon referred to as the “greenhouse effect.” Some GHGs occur naturally and are necessary for keeping the Earth's surface habitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount that is reflected into space, intensifying the natural greenhouse effect, and resulting in the increase of global average temperature.

Carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect is intensified. CO₂, methane, and nitrous oxide occur naturally and are also generated through human activity. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas methane results from off-gassing, natural gas leaks from pipelines and industrial processes, and incomplete combustion associated with agricultural practices, landfills, energy providers, and other industrial facilities. Nitrous oxide emissions are also largely attributable to agricultural practices and soil management. CO₂ sinks include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution, and are two of the largest reservoirs of CO₂ sequestration. Other human-generated GHGs include fluorinated gases such as

hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which have much higher heat-absorption potential than CO₂ and are byproducts of certain industrial processes.

CO₂ is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs have on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO₂. For example, methane and nitrous oxide are substantially more potent GHGs than CO₂, with GWPs of 25 and 298 times that of CO₂ respectively, which has a GWP of 1 (CARB, 2022).

In emissions inventories, GHG emissions are typically reported as metric tons of CO₂ equivalent (MTCO_{2e}). CO_{2e} is calculated as the product of the mass emitted of a given GHG and its specific GWP. While methane and nitrous oxide have much higher GWPs than CO₂, CO₂ is emitted in higher quantities and it accounts for the majority of GHG emissions in CO_{2e}, both from commercial developments and human activity in general.

Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of and inability to accurately model the Earth's climate system, the uncertainty surrounding climate change may never be eliminated completely. Nonetheless, the IPCC's AR5 states that it is extremely likely that the dominant cause of the observed warming since the mid-20th century is the anthropogenic increase in GHG concentrations (IPCC, 2014). The National Academies of Science from 80 countries have issued statements endorsing the consensus position that humans are the dominant cause for global warming since the mid-20th century (Cook et al., 2016).

The Fourth California Climate Change Assessment (Fourth Assessment), published in 2018, found that the potential impacts in California due to global climate change include: loss in snow pack; sea-level rise; more extreme heat days per year; more high ozone days; more extreme forest fires; more severe droughts punctuated by extreme precipitation events; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (California Office of Planning and Research [OPR], California Energy Commission [CEC] & California Natural Resources Agency [CNRA], 2018). The Fourth Assessment's findings are consistent with climate change studies published by the CNRA since 2009, starting with the *California Climate Adaptation Strategy* (CNRA, 2009) as a response to the Governor's Executive Order S-13-2008. In 2014, the CNRA rebranded the first update of the 2009 adaptation strategy as the *Safeguarding California Plan* (CNRA, 2014). The 2018 update to *Safeguarding California Plan* identifies hundreds of ongoing actions and next steps state agencies are taking to safeguard Californians from climate impacts within a framework of 81 policy principles and recommendations (CNRA, 2018).

In 2016, the CNRA released *Safeguarding California: Implementation Action Plans* in accordance with Executive Order B-30-15, identifying a lead agency to lead adaptation efforts in each sector (CNRA, 2016). In accordance with the 2009 *California Climate Adaptation Strategy*, the CEC was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers. The website, known as Cal-Adapt, became operational in 2011. The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios comprised of local average values for temperature, sea-level rise, snowpack and other data representative of a variety of models and scenarios, including potential social and economic factors. Below is a summary of some of the potential effects that could be experienced in California as a result of global warming and climate change.

Temperature Increase

The primary effect of adding GHGs to the atmosphere has been a rise in the average global temperature. The impact of human activities on global temperature is readily apparent in the observational record. Since 1895, the contiguous US has observed an average temperature increase of 1.5°F per century (National Oceanic and Atmospheric Association [NOAA], 2019). The 5-year period from 2014–2018 was the warmest on record for the contiguous U.S. (NOAA, 2019); of the top 10 hottest years on record in the U.S., seven have occurred since the year 2000, with the top six years all occurring since 2012 (Climate Central, 2022). The Fourth Assessment indicates that average temperatures in California could rise 5.6°F to 8.8°F by the end of the century, depending on the global trajectory of GHG emissions (OPR, CEC & CNRA, 2018). According to the Cal-Adapt website, the portion of the state in which the City of Mountain View is located could experience an increase in annual average maximum temperature of approximately 4.4° to 7.1°F by 2070–2090, compared to the baseline period of 1961–1990 (Cal Adapt, 2022).

With climate change, extreme heat conditions and heat waves are predicted to impact larger areas, last longer, and have higher temperatures. Heat waves, defined as three or more days with temperatures above 90°F, are projected to occur more frequently by the end of the century. Extreme heat days and heat waves can negatively impact human health. Heat-related illnesses include a spectrum of illnesses ranging from heat cramps to severe heat exhaustion and life-threatening heat stroke (Red Cross Red Climate Crescent Center [RCCC], 2019).

Wildfires

The hotter and dryer conditions expected with climate change will make forests more susceptible to extreme wildfires. The Fourth Assessment found that if GHG emissions continue to rise, the frequency of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and the average area burned statewide each year would increase by 77 percent, by the year 2100. In the areas that have the highest fire risk, wildfire insurance is estimated to see costs rise by 18 percent by 2055 and the fraction of property insured would decrease (Westerling, 2018).

Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California and make it more difficult for the state to achieve air quality standards. Climate change may increase the concentration of ground-level ozone, which can cause breathing problems, aggravate

lung diseases such as asthma, emphysema, chronic bronchitis, and cause chronic obstructive pulmonary disease, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. Emissions from wildfires can lead to excessive levels of particulate matter, ozone, and volatile organic compounds (NOAA, 2022). Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (RCCC, 2019).

Precipitation and Water Supply

There is a high degree of uncertainty with respect to the overall impact of global climate change on future water supplies in California. Studies indicate considerable variability in predicting precise impacts of climate change on California's hydrology and water resources. Increasing uncertainty in the timing and intensity of precipitation will challenge the operational flexibility of California's water management systems. Warmer and wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge (CNRA, 2018).

Hydrology and Sea-Level Rise

As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snowpack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea-level rise and coastal flooding; coastal erosion; and the potential for saltwater intrusion. Sea-level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Sea level has risen eight to nine inches (21–24 centimeters) since 1880. In 2020, global sea level set a new record high of 91.3 mm (3.6 inches) above 1993 levels. The rate of sea level rise is accelerating; it has more than doubled from 0.06 inches (1.4 millimeters) per year throughout most of the twentieth century to 0.14 inches (3.6 millimeters) per year from 2006–2015. In many locations along the U.S. coastline, high-tide flooding is now 300 percent to more than 900 percent more frequent than it was 50 years ago. Sea level could rise as much as 8.2 feet (2.5 meters) above 2000 levels by 2100 (NOAA, 2021). Rising seas could impact transportation infrastructure, utilities, and regional industries. The San Francisco Bay Area is one of the top hotspots for sea-level rise in the nation. According to the Shoreline Sea Level Rise Study, the San Francisco Bay could rise between 8 and 31 inches by 2067, potentially flooding a large portion of northern Mountain View (City of Mountain View, 2013).

Agriculture

California has a massive agricultural industry that represents over 13 percent of total U.S. agricultural revenue (California Department of Food and Agriculture [CDFA], 2020). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, a changing climate presents significant risks to agriculture due to changes in maximum and minimum temperatures, reduction of winter chill hours, extreme heat leading to additional costs

for livestock cooling and losses in production, and declines in water quality, groundwater security, soil health, and pollinator species, and increased pest pressures (CNRA, 2018).

Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increased concentrations of GHGs are likely to accelerate the rate of climate change. As stated in the *Safeguarding California Plan*, “species and ecosystems in California are valued both for their intrinsic worth and for the services they provide to society. Air purification, water filtration, flood attenuation, food provision, recreational opportunities such as fishing, hunting, wildlife viewing, and more are all services provided by ecosystems. These services can only be maintained if ecosystems are healthy and robust, and continue to function properly under the impacts of climate change. A recent study examined the vulnerability of all vegetation communities statewide in California and found that 16 of 29 were highly or nearly highly vulnerable to climate change, including Western North American freshwater marsh, Rocky Mountain subalpine and high montane conifer forest, North American Pacific coastal salt marsh, and more.” Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. With climate change, ecosystems and wildlife will be challenged by the spread of invasive species, barriers to species migration or movement in response to changing climatic conditions, direct impacts to species health, and mismatches in timing between seasonal life-cycle events such as species migration and food availability (CNRA, 2018).

GHG Emissions Inventories

U.S. GHG Emissions

In 2019, the United States emitted about 6,558 million metric tons of CO₂e (MMTCO₂e), with 76 percent of those emissions coming from fossil fuel combustion for electricity, heat and transportation. Of the major sectors nationwide, transportation accounts for the highest volume of GHG emissions (approximately 29 percent), followed by electricity (25 percent), industry (23 percent), commercial and residential (13 percent), and agriculture (10 percent). Between 1990 and 2019, total U.S. GHG emissions have increased by 1.8 percent, but emissions have generally decreased since peaking in 2007 (U.S. EPA, 2021).

State of California GHG Emissions

The California Air Resources Board (CARB) compiles GHG inventories for the state. Based on the 2019 GHG inventory data (i.e., the latest year for which data are available from CARB), emissions from GHG emitting activities statewide were 418.1 MMTCO₂e (CARB, 2021a). Between 1990 and 2021, the population of California grew by approximately 10 million from 29.6 to 39.5 million (California Department of Finance [CDF], 2022a). This represents an increase of approximately 34 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$3.14 trillion in 2019, representing an increase of approximately 306 percent (more than three times the 1990 gross state product) in today’s dollars (CDF, 2022b).

Despite the population and economic growth, CARB’s 2019 statewide inventory indicated that California’s net GHG emissions in 2019 were 13 MMTCO₂e below 1990 levels, which is the 2020 GHG reduction target codified in California Health and Safety Code Division 25.5, also known as the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). **Table 4.7-1** identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2019. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at approximately 39.7 percent in 2019.

**TABLE 4.7-1
 STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS**

Category	Total 1990 Emissions using IPCC SAR (MMTCO ₂ e)	Percent of Total 1990 Emissions ^e SAR/AR4	Total 2019 Emissions using IPCC AR4 (MMTCO ₂ e)	Percent of Total 2019 Emissions
Transportation	150.7	35%/35%	166.1	39.7%
Electric Power	110.6	26%/26%	58.8	14.1%
Commercial & Residential Fuel Use	44.1	10%/10%	43.8	10.5%
Industrial	103.0	24%/24%	88.2	21.1%
Recycling and Waste ^a	–	–	8.9	2.1%
High GWP/Non-Specified ^b	1.3	<1%/<1%	20.6	4.9%
Agriculture/Forestry	23.6	6%/5%	31.8	7.6%
Forestry Sinks	-6.7		-- ^c	--
Net Total (IPCC SAR)	426.6	100%^e	--	--
Net Total (IPCC AR4)^d	431	100%	418.2	100%

NOTES: IPCC = Intergovernmental Panel on Climate Change; SAR = Second Assessment Report; AR4 = Fourth Assessment Report.

^a Included in other categories for the 1990 emissions inventory.

^b High global warming potential (GWP) gases are not specifically called out in the 1990 emissions inventory.

^c Revised methodology under development (not reported for 2019).

^d CARB revised the State’s 1990 level GHG emissions using GWPs from the IPCC AR4.

^e Values may not total to 100% due to rounding

SOURCES: CARB, 2007; CARB, 2021a.

Bay Area GHG Emissions

Based on 2015 data, in the nine-county San Francisco Bay Area, GHG emissions from the transportation sector represented the largest source of GHG emissions at 41 percent, followed by the stationary industrial sources at 26 percent, electricity generation and co-generation at 14 percent, and fuel use (primarily natural gas) by buildings at 10 percent. The remaining 8 percent of emissions is composed of fluorinated gas emissions and emissions from solid waste and agriculture. According to the Bay Area Air Quality Management District (BAAQMD), of the total transportation emissions in 2015, on-road sources accounted for approximately 87 percent, while off-road sources accounted for the remainder (BAAQMD, 2017a).

City of Mountain View GHG Emissions

The City conducts a GHG inventory to measure GHG emissions generated community-wide and by municipal operations. While emissions from municipal operations make up less than two percent of all emissions generated community-wide, the City strives to provide services to the

public more efficiently and reduce its environmental impact. The City reduced emissions from municipal operations by 51 percent between 2005 and 2018. On the other hand, community-wide emissions which are not under the direct control of the City reduced by 14 percent between 2005 and 2019. As of 2019, community-wide GHG emissions totaled 606,614 MTCO_{2e} (Table 4.7-2).

**TABLE 4.7-2
CITY OF MOUNTAIN VIEW GREENHOUSE GAS EMISSIONS**

Category	2005 Emissions (MTCO _{2e})	2018 Emissions (MTCO _{2e})	2019 Emissions (MTCO _{2e})	Percent of
Energy				
Residential - Electricity	36,307	801	175	<0.1
Residential – Natural Gas	64,065	57,449	57,610	9.5
Non-Residential - Electricity	138,119	42,833	37,812	6.2
Non-Residential – Natural Gas	57,071	57,098	58,182	9.6
<i>Energy Subtotal</i>	<i>295,562</i>	<i>158,181</i>	<i>153,780</i>	<i>25.4</i>
Transportation				
Passenger/Light-Duty	309,162	341,939	307,891	50.8
Medium/Heavy-Duty	64,915	53,737	84,597	13.9
<i>Transportation Subtotal</i>	<i>374,077</i>	<i>395,676</i>	<i>392,488</i>	<i>64.7</i>
Waste				
Solid Waste	12,248	17,093	18,932	3.1
Alternate Daily Cover	77	0.5	0	<0.1
<i>Waste Subtotal</i>	<i>12,325</i>	<i>17,094</i>	<i>18,932</i>	<i>3.1</i>
Water				
Water Demand	4,384	84	2	<0.1
Wastewater Treatment	11,144	2,957	1,302	0.2
<i>Water Subtotal</i>	<i>15,528</i>	<i>3,040</i>	<i>1,304</i>	<i>0.2</i>
Off-Road Mobile				
Construction	4,793	3,786	9,871	1.6
Lawn/Garden	1,767	--	--	--
Commercial Equipment	--	10,948	11,071	1.8
Industrial Equipment	--	18,994	19,169	3.2
<i>Off-Road Mobile Subtotal</i>	<i>6,560</i>	<i>333,727</i>	<i>40,111</i>	<i>6.6</i>
Total ^a	704,052	607,718	606,614	100

NOTES: MTCO_{2e} = metric tons of carbon dioxide equivalent

^a Values may not total to 100% due to rounding

SOURCE: City of Mountain View, 2022.

4.7.3 Regulatory Setting

Federal

Vehicle Emissions Standards

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are responsible for

establishing additional vehicle standards. In August 2012, standards were adopted for model years 2017 through 2025 for passenger cars and light-duty trucks. According to EPA, a model year 2025 vehicle would emit half the GHG emissions of a model year 2010 vehicle (USEPA and NHTSA, 2010). Notably, the State of California harmonized its vehicle efficiency standards through 2025 with the federal standards at this time (see *Advanced Clean Cars Program* below).

In August 2018, EPA and the NHTSA proposed maintaining the 2020 corporate average fuel economy (CAFE) and CO₂ standards for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 miles per gallon (mpg) and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. In September 2019, EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013 (USEPA & NHTSA, 2019).

State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs within the State. The major components of California's climate protection initiative are reviewed below.

CARB is the agency with regulatory authority over air quality issues in California. CARB adopts regulations designed to reduce criteria pollutants, toxic air contaminants, and GHG emissions; and establishes vehicle emission standards. As discussed earlier, CARB is responsible for preparing, adopting, and updating California's GHG inventory. Additional responsibilities of CARB with respect to specific State mandates are discussed below.

CEQA Guidelines

The CEQA Guidelines are embodied in the California Code of Regulations (CCR), Title 14, beginning with Section 15000. The current CEQA Guidelines Section 15064.4 states that "a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project." Section 15064.4 further states:

A lead agency should consider the following factors, when determining the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see e.g., section 15183.5(b)).*

The CEQA Guidelines also state that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHG

emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (CEQA Guidelines Section 15064(h)(3)).

The CEQA Guidelines do not require or recommend a specific analytical method or provide quantitative criteria for determining the significance of GHG emissions, nor do they set a numerical threshold of significance for GHG emissions. Section 15064.7(c) clarifies that “when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

When GHG emissions are found to be significant, CEQA Guidelines Section 15126.4(c) includes the following direction on measures to mitigate GHG emissions:

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

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

State of California Executive Orders

Executive Order B-16-12

In March 2012, then-Governor Jerry Brown issued an executive order establishing a goal of 1.5 million zero-emission vehicles (ZEVs) on California roads by 2025. In addition to the ZEV goal, Executive Order B-16-12 stipulated that by 2015 all major cities in California will have adequate infrastructure and be “zero-emission vehicle ready”; that by 2020 the state will have established adequate infrastructure to support 1 million ZEVs; that by 2050, virtually all personal transportation in the state will be based on ZEVs; and that GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

Executive Order B-30-15

Governor Brown signed Executive Order B-30-15 on April 29, 2015, which:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030;
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets; and
- Directed CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of MMTCO₂e.

Executive Order B-48-18

On January 26, 2018, Governor Brown issued an executive order establishing a goal of 5 million ZEVs on California roads by 2030.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18, committing California to total, economy-wide carbon neutrality by 2045. Executive Order B-55-18 directs CARB to work with relevant state agencies to develop a framework to implement and accounting to track progress toward this goal.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, which sets new statewide goals for phasing out gasoline-powered cars and trucks in California. EO N-79-20 requires that 100 percent of in-state sales of new passenger cars and trucks are to be zero-emission by 2035; 100 percent of in-state sales of medium- and heavy-duty trucks and busses are to be zero-emission by 2045 where feasible; and 100 percent of off-road vehicles and equipment sales are to be zero-emission by 2035 where feasible.

State of California Policy and Legislation

Assembly Bill 117 and Senate Bill 790

In 2002, the State of California passed AB 117, enabling public agencies and joint power authorities to form a Community Choice Aggregation (CCA). SB 790 strengthened it by creating a “code of conduct” that the incumbent utilities must adhere to in their activities relative to CCAs. CCAs allow a city, county, or group of cities and counties to pool electricity demand and purchase/generate power on behalf of customers within their jurisdictions in order to provide local choice. CCAs work with PG&E to deliver power to its service area. The CCA is responsible for the electric generation (procure or develop power) while PG&E is responsible for electric delivery, power line maintenance, and monthly billing.

Senate Bills 1078 and 107

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply

from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

Assembly Bill 32 and Senate Bill 32

As discussed in the DTPP Final EIR, the California Global Warming Solutions Act of 2006 (AB 32) required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that would be phased in starting in 2012.

In 2016, SB 32 and its companion bill AB 197 amended Health and Safety Code Division 25.5, establishing a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and included provisions to ensure that the benefits of state climate policies reach disadvantaged communities.

Climate Change Scoping Plan

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial scoping plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB, 2008).

CARB approved the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) in December 2017. The 2017 Scoping Plan Update outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels (CARB, 2017). Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO_{2e}, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO_{2e} beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the cap-and-trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by Executive Order B-30-15.

In the 2017 Scoping Plan Update, CARB recommends statewide targets of no more than 6 MTCO_{2e} per capita by 2030 and no more than 2 MTCO_{2e} per capita by 2050. CARB acknowledges that because the statewide per-capita targets are based on the statewide GHG emissions inventory that includes all emissions sectors in the state, it is appropriate for local jurisdictions to derive evidence-based local per-capita goals based on local emissions sectors and growth projections.

To demonstrate how a local jurisdiction can achieve its long-term GHG goals at the community plan level, CARB recommends developing a geographically specific GHG reduction plan (i.e., climate action plan) consistent with the requirements of CEQA Section 15183.5(b). A so-called "CEQA-qualified" GHG reduction plan, once adopted, can provide local governments with a streamlining tool for project-level environmental review of GHG emissions, provided there are adequate performance metrics for determining project consistency with the plan. Absent conformity with such a plan, CARB recommends "that projects incorporate design features and

GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.” While acknowledging that recent land use development projects in California have demonstrated the feasibility to achieve zero net additional GHG emissions (e.g., Newhall Ranch Resource Management and Development Plan), the 2017 Scoping Plan Update states that:

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State’s long-term GHG goals, and climate change science... To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT [vehicle miles traveled], and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits locally.

Cap-and-Trade Program

Initially authorized by AB 32 and extended through the year 2030 with the passage of AB 398 (2017), the California Cap-and-Trade Program is a core strategy that the state is using to meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from “covered entities”¹ (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 MTCO₂e per year), setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve reductions.² Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors. The statewide cap for GHG emissions from the capped sectors commenced in 2013. The cap declines over time. Facilities subject to the cap can trade offsets and allowances to emit GHGs.³

Senate Bill 375

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California’s 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations. The target reductions for the Bay Area are a regional reduction of per-capita GHG emissions from cars and light-duty trucks by 7 percent by 2020 and by 15 percent by 2035, compared to a 2005 baseline.

¹ “Covered entity” means an entity in California that has one or more of the processes or operations and has a compliance obligation as specified in Sub article 7 of the Cap-and-Trade Regulation; and that has emitted, produced, imported, manufactured, or delivered in 2008 or any subsequent year more than the applicable threshold level specified in section 95812(a) of the Regulation.

² 17 CCR 95800–96023.

³ See generally 17 CCR 95811 and 95812.

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) address these goals in *Plan Bay Area 2040*, which identifies Priority Development Areas (PDAs) near transit options to reduce the use of on-road vehicles. By focusing and incentivizing future growth in PDAs, *Plan Bay Area 2040* demonstrates how the nine-county Bay Area can reduce per-capita CO₂ emissions by 16 percent by 2035 (MTC & ABAG, 2017). In a March 2018 hearing, CARB approved revised targets: to reduce per-capita emissions 10 percent by 2020 and 19 percent by 2035 (CARB, 2018a). MTC and ABAG adopted *Plan Bay Area 2050* in October 2021, but CARB has not made a determination yet on whether the plan achieves the required targets. As such, the currently applicable plan is still *Plan Bay Area 2040*.

California Renewables Portfolio Standard (RPS)

Senate Bills 1078 and 107

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

Senate Bill X 1-2

SB X 1-2, signed by Governor Brown in April 2011, enacted the California Renewable Energy Resources Act. The law obligated all California electricity providers, including investor-owned and publicly owned utilities, to obtain at least 33 percent of their energy from renewable resources by the year 2020.

Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015 (Chapter 547, Statutes of 2015), was approved by Governor Brown on October 7, 2015. SB 350 increased the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030. The act requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in existing electricity and natural gas final end uses of retail customers by January 1, 2030.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, the law increases the percentage of energy that both investor-owned utilities and publicly owned utilities must obtain from renewable sources from 50 percent to 60 percent by 2030. Incrementally, these energy providers must also have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, because many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

Advanced Clean Cars Program

In January 2012, pursuant to Recommended Measures T-1 and T-4 of the Scoping Plan, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZEVs. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

In response to a midterm review of the standards in March 2017, CARB directed staff to begin working on post-2025 model year vehicle regulations (Advanced Clean Cars II) to research additional measures to reduce air pollution from light-duty and medium-duty vehicles. Additionally, as described earlier, in September 2020, Governor Newsom signed Executive Order N-79-20 that established a goal that 100 percent of California sales of new passenger car and trucks be zero-emission by 2035 and directed CARB to develop and propose regulations toward this goal. The primary mechanism for achieving these targets for passenger cars and light trucks is the Advanced Clean Cars II Program.

Mobile Source Strategy

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next 15 years. The strategy promotes a transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of VMT. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. The strategy also calls for more-stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero emission trucks primarily for class 3–7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions from mobile sources and a 50 percent reduction in the consumption of petroleum-based fuels (CARB, 2016).

Similar to the 2016 Mobile Source Strategy, the 2020 Strategy is a framework that identifies the levels of cleaner technologies necessary to meet the many goals and high-level regulatory concepts that would allow the State to achieve the levels of cleaner technology. The 2020 Strategy will inform the development of other planning efforts including the State Implementation Plan (SIP) which will translate the concepts included into concrete measures and commitments for specific levels of emissions reductions, the 2022 Climate Change Scoping Plan (2022 Scoping Plan Update), and Community Emissions Reduction Plans (CERPs) required for communities selected as a part of CARB’s Community Air Protection Program. Central to all of these planning efforts, and CARB actions on mobile sources going forward, will be environmental justice as CARB strives to address longstanding environmental and health inequities from elevated levels of toxics, criteria pollutants, and secondary impacts of climate change (CARB, 2021b). The 2020 Mobile Source Strategy illustrates that an aggressive deployment of ZEVs will be needed for the State to meet federal air quality requirements and the State’s climate change targets.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (13 CCR Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure prohibits diesel-fueled commercial vehicles from idling for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in GHG reduction and energy savings in the form of reduced fuel consumption from unnecessary idling.

Airborne Toxic Control Measure for Stationary Compression Ignition Engines

In 2004, CARB adopted an Airborne Toxic Control Measure to reduce public exposure to emissions of diesel particulate matter and criteria pollutants from stationary diesel-fueled compression ignition engines (17 CCR Section 93115). The measure applies to any person who owns or operates a stationary compression ignition engine in California with a rated brake horsepower greater than 50, or to anyone who either sells, offers for sale, leases, or purchases a stationary compression ignition engine. This measure outlines fuel and fuel additive requirements; emissions standards; recordkeeping, reporting and monitoring requirements; and compliance schedules for compression ignition engines.

Truck and Bus Regulation

In addition to limiting exhaust from idling trucks, in 2008 CARB approved the Truck and Bus Regulation to reduce the emissions of oxides of nitrogen and particulate matter from existing diesel vehicles operating in California (13 CCR Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. This regulation will be implemented in phases, with full implementation by 2023.

CARB also promulgated emissions standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installing diesel soot filters and encouraging the retirement, replacement, or repowering of older, dirtier engines with newer emissions-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

Advanced Clean Trucks Program

On June 25, 2020, CARB adopted the Advanced Clean Trucks rule, which requires truck manufacturers to transition from diesel vehicles to electric ZEVs beginning in 2024, with the goal of reaching 100 percent ZEVs by 2045. The goal of the legislation is to help California meet its climate targets of a 40 percent reduction in GHG emissions and a 50 percent reduction in petroleum use by 2030, and an 80 percent reduction in GHG emissions by 2050.

Truck manufacturers will be required to sell ZEVs as an increasing percentage of their annual sales from 2024 through 2035. Companies with large distribution fleets (50 or more trucks) will be required to report information about their existing fleet operations in an effort to identify future strategies for increasing zero-emission fleets statewide (CARB, 2021b).

ZEVs are two to five times more energy efficient than diesel vehicles, and the Advanced Clean Trucks rule will reduce GHG emissions with the co-benefit of reducing dependence on petroleum fuels.

Senate Bill 743

In 2013, Governor Brown signed SB 743, which added Public Resources Code Section 21099 to CEQA. SB 743 changed the way that transportation impacts are analyzed under CEQA, better aligning local environmental review with statewide objectives to reduce GHG emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. The new VMT metric is intended to replace the use of automobile delay and level of service as the metric to analyze transportation impacts under CEQA.

In its 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR recommends different thresholds of significance for projects depending on land use types (OPR, 2018).

Senate Bill 1383 (Short-Lived Climate Pollutants)

SB 1383, enacted in 2016, requires statewide reductions in short-lived climate pollutants across various industry sectors. The climate pollutants covered under SB 1383 include methane, fluorinated gases, and black carbon—all GHGs with a much higher warming impact than CO₂ and with the potential to have detrimental effects on human health. SB 1383 requires CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emissions reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

Assembly Bill 341

AB 341, which became law in 2011, established a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. The new law changed the way that the state measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling, and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week and multifamily residential dwellings with five units or more to have a recycling program in place (California Legislative Information, 2011). The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California.

Assembly Bill 1826

AB 1826, known as the Commercial Organic Waste Recycling Law, became effective on January 1, 2016, and requires businesses and multi-family complexes (with five units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier:** Commenced in April 2016, the first tier of affected businesses included those that generate 8 or more cubic yards of organic materials per week.
- **Second Tier:** In January 2017, the affected businesses expanded to include those that generate 4 or more cubic yards of organic materials per week.
- **Third Tier:** In January 2019, the affected businesses expanded further to include those that generate 4 or more cubic yards of commercial solid waste per week.

State of California Building Codes

California Building and Energy Efficiency Standards (Title 24)

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although the standards were not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and non-residential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The current Title 24, Part 6 standards (2019 standards; CEC, 2018) were made effective on January 1, 2020.

On August 11, 2021, the CEC adopted the 2022 Energy Code and was approved by the California Building Standards Commission for inclusion into the California Building Standards Code (CEC, 2021). The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for or after January 1, 2023, must comply with the 2022 Energy Code. The 2022 Update includes measures that will reduce energy use in single family, multifamily, and nonresidential buildings. These measures will affect newly constructed buildings and:

- Add new prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California;
- Require photovoltaic and battery storage systems for newly constructed multifamily and selected nonresidential buildings;
- Establish efficiency measures for lighting, building envelope, HVAC, and ventilation for indoor air quality; and
- Make improvements to reduce the energy loads of certain equipment covered by (i.e., subject to the requirements of) the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

California Green Building Standards Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution-emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. CALGreen covers a number of fields, with regulations encompassing energy efficiency, water conservation, sustainable building materials, site design, and air quality.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is reviewed and updated on a three-year cycle.

The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020 (California Building Standards Commission [CBSC], 2019). The 2019 standards prescribe EV charging requirements for residential and non-residential buildings.

The 2022 CALGreen update simplifies the code and its application in several ways. It offers new voluntary prerequisites for builders to choose from, such as battery storage system controls and heat pump space, and water heating, to encourage building electrification. While the 2019 CALGreen Code only requires provision of EV Capable spaces with no requirement for chargers to be installed at multifamily dwellings, the 2022 CALGreen code mandates chargers (California Housing and Community Development, n.d).

Regional

The BAAQMD is the regional government agency that regulates stationary sources of air pollution in the nine San Francisco Bay Area counties. BAAQMD regulates GHG emissions through the following plans, programs, and guidelines.

BAAQMD Clean Air Plan

BAAQMD and other air districts prepare clean air plans in accordance with the federal and state Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate*, an update to the 2010 Clean Air Plan (BAAQMD, 2017a). The 2017 Clean Air Plan is a comprehensive plan that focuses on the closely related goals of protecting public health and protecting the climate. Consistent with the State's GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

BAAQMD Climate Protection Program

BAAQMD established a climate protection program (Program) to reduce pollutants that contribute to global climate change and affect air quality in the San Francisco Bay Area Air Basin. The Program is focused on meeting the 2050 target, as the 2017 Clean Air Plan discussed

above is focused on the interim 2030 target. The Program includes measures that promote energy efficiency, reduce VMT, and develop alternative sources of energy, all of which assist in reducing GHG emissions and reducing air pollutants that affect the health of residents. BAAQMD also seeks to support other climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed in the Bay Area. The guidelines also include recommended assessment methodologies for air toxics, odors, and GHG emissions. In June 2010, BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of the BAAQMD CEQA Guidelines, which included significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated by the California Legislature in AB 32. The first threshold, 1,100 MTCO₂e per year, is a numeric emissions level below which a project's contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MTCO₂e per service population or better. Because these thresholds are based on a 2020 GHG target they are no longer relevant for current and future projects. Under the current BAAQMD Air Quality Guidelines, a local government may prepare a qualified GHG reduction strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG reduction strategy and general plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA (BAAQMD, 2017b).

In February, 2022, in response to SB 32 and 2017 Scoping Plan Update targets for 2030 and EO B-15 target for carbon neutrality no later than 2045, the BAAQMD adopted updated CEQA significance thresholds for GHGs in its Justification Report (BAAQMD, 2022).

Plan Bay Area

The MTC is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes Santa Clara County and the city of Mountain View. On July 18, 2013, Plan Bay Area was jointly approved by ABAG's Executive Board and the MTC. The plan includes the region's Sustainable Communities Strategy, as required under SB 375, and the 2040 Regional Transportation Plan. The Sustainable Communities Strategy lays out how the region will meet GHG reduction targets set by CARB. CARB's current targets call for the region to reduce per-capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline (CARB, 2018b).

A central GHG reduction strategy of Plan Bay Area is the concentration of future growth in PDAs and Transit Priority Areas (TPAs). To be eligible for PDA designation, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service and planned for more housing. A TPA is an area within 0.5 miles of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes (MTC, 2013).

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC & ABAG, 2017).

On October 21, 2021, the MTC and the Executive Board of the ABAG jointly adopted *Plan Bay Area 2050* and its related supplemental reports. *Plan Bay Area 2050* connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). Many of the HEU sites are located within a PDA and/or a TPA. It will be several years before the regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040).

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Infrastructure and Conservation Element of the General Plan includes the following policies related to Climate Change (City of Mountain View, 2021a).

Goal INC-12: Environmental stewardship that recognizes the importance of addressing climate change and community commitment to sustainability.

Policy INC-12.1: Emissions reduction target. Maintain a greenhouse gas emissions reduction target.

Policy INC-12.2: Emissions reduction strategies. Develop cost-effective strategies for reducing greenhouse gas emissions.

Policy INC-12.3: Adaptation strategies. Develop strategies for adapting to climate change in partnership with local and regional agencies.

In addition, the following goals and policies that address water conservation, recycled water, solid waste and recycling, energy production and consumption, and green building would also help reduce GHGs.

Water Conservation Water conservation policies focus on City-led programs and outreach and reducing per capita water use.

Goal INC-5: Effective and comprehensive programs utilizing water use efficiency, water conservation and alternative water supplies to reduce per capita potable water use.

Policy INC-5.1: Community awareness. Raise community awareness about water use efficiency and water conservation.

Policy INC-5.2: Citywide water conservation. Reduce water waste and implement water conservation and efficiency measures throughout the city.

Policy INC-5.3: Water reuse. Remove barriers and provide guidance for the use of rainwater and graywater as alternative water supplies.

Policy INC-5.4: Smart water meters. Encourage water meter technologies that provide water usage feedback to customers.

Policy INC-5.5: Landscape efficiency. Promote water-efficient landscaping including drought-tolerant and native plants, along with efficient irrigation techniques.

Policy INC-5.6: Indoor efficiency. Promote the use of water-efficient fixtures and appliances.

Policy INC-5.7: Leadership in City facilities. Provide leadership by promoting water use efficiency, water conservation and the use of recycled water at City-owned facilities.

Recycled water policies guide the expansion and continued use of recycled water throughout Mountain View, contributing to the City's water conservation and environmental sustainability efforts.

Goal INC-7: A reliable, safe and extensive recycled water infrastructure system.

Policy INC-7.1: Citywide recycled water use. Promote, require or offer incentives for using recycled water as an alternative to potable water.

Policy INC-7.2: Recycled water system. Expand the use and availability of recycled water throughout the city.

Policy INC-7.3: Recycled water in parks. Promote the use of recycled water at City parks and open spaces or where available.

Policy INC-7.4: Recycled water and trees. Promote appropriate tree and landscape species irrigated by recycled water.

Policy INC-7.5: Rights-of-way and infrastructure. Design public rights-of-way to accommodate recycled water infrastructure.

Solid waste and recycling policies encourage efficient use of natural resources and continue the City's leadership in environmental sustainability, with a focus on supply-chain management and advocacy as well as high-quality services and programs.

Goal INC-10: Reduced waste through supply-chain management, advocacy and outreach to reduce waste.

Policy INC-10.1: Zero waste. Pursue a citywide goal of zero waste.

Policy INC-10.2: Producer responsibility. Support extended producer responsibility to reduce waste and toxicity at the manufacturing level.

Policy INC-10.3: Source reduction. Encourage and promote source reduction behavior such as utilizing reusable, returnable and repairable goods.

Policy INC-10.4: Construction waste reuse. Encourage building deconstruction and reuse and construction waste recycling.

Policy INC-10.5: Reuse. Encourage product reuse through venues such as garage sales, lending libraries and Internet-based sharing and reuse forums.

Policy INC-10.6: Recovered materials. Encourage uses for recovered materials that save energy, avoid releasing toxic substances and extend the useful life of recovered materials.

Policy INC-10.7: Recycled material demand. Promote increased demand for recycled materials.

Policy INC-10.9: Preferential purchasing. Give preference in City purchasing to products that minimize packaging, can be reused and are non-toxic.

Policy INC-10.10: Single-use products. Discourage the use of single-use products.

Goal INC-11: Services and programs that continue to reduce waste and promote environmental responsibility.

Policy 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 reduction programs.

Policy INC-11.2: Recycling. Maintain and expand recycling programs.

Policy INC-11.3: Composting. Provide productive reuse or composting services or both for all discarded organic materials in the city, including all food and green waste.

Policy INC-11.4: Solid waste. Ensure all municipal solid waste generated within the city is collected, transported and disposed of in a manner that protects public health and safety.

Policy INC-11.5: Hazardous waste. Provide convenient household hazardous waste and e-waste disposal services.

Policy INC-11.6: Regional collaboration. Consider opportunities to provide more cost effective solid waste management by collaborating with surrounding cities and agencies.

Energy policies reduce the negative environmental impacts of energy use, focusing on sustainable consumption through efficiency, conservation and sustainable production through increased use of renewable energy.

Goal INC-13: Increased energy efficiency and conservation throughout the city.

Policy INC-13.1: Energy efficiency and conservation. Increase energy efficiency and conservation in public buildings and infrastructure.

Policy INC-13.2: Alternatives to gasoline. Promote and increase the use of new technologies as alternatives and supplements to gasoline in vehicles throughout the community.

Policy INC-13.3: Coordinating efforts. Support regional and local efforts and programs to reduce energy use.

Policy INC-13.4: Education. Educate the public about energy conservation and efficiency best practices.

Policy INC-13.5: Smart utility meters. Encourage utility meter technologies that provide feedback about energy usage to customers.

Goal INC-14: Sufficient renewable sources of energy to meet current and future demand.

Policy INC-14.1: Renewable energy. Promote the deployment of renewable energy technologies throughout the city.

Policy INC-14.2: Solar energy. Encourage active and passive solar energy use.

Policy INC-14.3: Regional renewable energy. Participate in regional initiatives to encourage and develop renewable energy sources.

Policy INC-14.4: Renewable energy advocacy. Support legislation to facilitate and increase renewable energy choices for community residents such as green utility power options or distributed generation.

Green Building Green building policies encourage green building approaches to reduce negative environmental impacts and improve human health.

Goal INC-15: A built environment that supports ecological and human health.

Policy INC-15.1: Green building program. Administer a forward-looking green building program that promotes best practices for green building in new and existing buildings.

Policy INC-15.2: Green building education. Raise community awareness regarding green building methods, incentives and benefits.

Policy INC-15.3: Citywide green building. Support green building technologies and innovations throughout the city.

Climate Action Planning in Mountain View

In November 2009, the City Council adopted the following voluntary, absolute community-wide GHG emission reduction targets:

- 5 percent below 2005 baseline levels by 2012
- 10 percent below 2005 baseline levels by 2015
- 15–20 percent below 2005 baseline levels by 2020
- 80 percent below 2005 baseline levels by 2050.

These absolute targets called for a reduction in total community-wide greenhouse gas emission levels, and do not allow for increased emissions due to population growth.

Mountain View Greenhouse Gas Reduction Program

In 2012, the City adopted a Greenhouse Gas Reduction Plan (GGRP; City of Mountain View, 2012) to implement the 2030 General Plan policies relating to climate change and mitigate GHG emissions associated with development allowed in the 2030 Mountain View General Plan. At the time, BAAQMD guidelines required qualified GHG reduction plans to contain a target for 2020 and provide substantial evidence that the plan's reduction actions would achieve the selected target. The BAAQMD guidelines allowed cities to use either an absolute or an efficiency-based target. During development of the GGRP, it became evident that it would be difficult to achieve the adopted community-wide 2020 emission reduction target and the City chose to use a BAAQMD-approved emissions efficiency target (i.e., a per-capita target) within the GGRP that would result in a community emissions efficiency of below 6.0 metric tons of carbon dioxide equivalent per service population.⁴ While the GGRP defines actions that will improve community GHG efficiency in 2020 and 2030, it does not contain actions strong enough to achieve the City's adopted absolute targets.

Climate Protection Roadmap (CPR)

To address the inconsistency of the efficiency targets used within the GGRP with its previously adopted absolute targets, the City initiated the Climate Protection Roadmap (CPR; City of Mountain View, 2015) project to evaluate the feasibility of achieving the adopted targets.

Community-wide GHG emissions in Mountain View are anticipated to increase to 68 percent above 2005 levels by 2050. The CPR evaluates mechanisms through which the community could achieve the emission reduction target to reduce community emissions 80 percent below 2005 levels by 2050 and identifies various roles the City might play in facilitating such reductions. The CPR evaluates a variety of technological, behavioral, and/or other system transitions that could reduce emissions within the community, identifies the most important transitions and actions (referred to as implementation mechanisms) within the City's authority that could contribute to these transitions. The CPR is not a plan in and of itself, but an analysis that may be used by City officials to evaluate the potential for long-term communitywide emission reduction initiatives moving forward. Due to the high-level nature of the analysis, the CPR does not explicitly direct implementation of any specific city actions. However, it outlines viable options for future city programs, policies, and actions that could be pursued following additional feasibility analysis. Moving toward achieving the community emission reduction targets, the CPR identifies interim community emission reduction targets for every five-year period between 2020 and 2050 to help keep the City on track to achieve its long-term 2050 reduction target. The CPR recommends the following interim targets:

- 26 percent below 2005 baseline levels by 2025
- 37 percent below 2005 baseline levels by 2030
- 48 percent below 2005 baseline levels by 2035

⁴ Service population is defined as residents and employees.

- 58 percent below 2005 baseline levels by 2040
- 69 percent below 2005 baseline levels by 2045.

Accelerated Community Emission Reduction Targets

On December 3, 2019, the City Council approved a proposal to change the existing community emission reduction targets, which declined along a relatively linear path, to decline based on a constant annual percentage. This change was consistent with the recommendations in the Special Report released by the United Nations' Intergovernmental Panel on Climate Change (IPCC) in late 2018, which emphasized the necessity of significant, near-term reductions by 2030 to avoid catastrophic climate change impacts. Following are the current community emission reduction targets:

- 33 percent below 2005 baseline levels by 2025
- 47 percent below 2005 baseline levels by 2030
- 59 percent below 2005 baseline levels by 2035
- 68 percent below 2005 baseline levels by 2040
- 75 percent below 2005 baseline levels by 2045.

Environmental Sustainability Action Plans (ESAPs)

To focus its sustainability efforts, the City has developed four, 3-year tactical Environmental Sustainability Action Plans (ESAPs) that specify policies, programs, and projects to implement across all sustainability areas within the community and municipal operations. Each ESAP is developed through an extensive stakeholder engagement process with the City Council, city staff, and the public. The City adopted its current Sustainability Action Plan 4 (2019-2022; City of Mountain View, 2019a) in October 2019, which identifies 27 goals across seven sectors (transportation, buildings and energy, land use, zero waste, water, park and eco systems, core sustainability programs and governance) and 81 new actions in addition to 79 actions that were already underway at the time of the plan's adoption.

2019 Mountain View Green Building and Reach Codes

On November 12, 2019, the City Council adopted the Mountain View Green Building Code (MVGBC; City of Mountain View, 2019b) amendments, which include the Reach Code efforts. The MVGBC amends the State-mandated California Green Building Code (CalGreen) to include local green building standards and requirements for private development. The MVGBC applies green building requirements per building type and threshold to new construction, residential additions and commercial/industrial tenant improvements and includes energy efficiency standards that exceed the 2019 Building Energy Efficiency Standards.

All new structures in the City of Mountain View must comply with the mandatory measures of the 2019 California Green Building Standards Code as adopted by the state in addition to local amendments included in this code. This includes all residential new construction projects regardless of height or number of stories.

Section 8.20.9 of the MVGBC amends Subsection 101.10.1.1.3 of the 2019 California Green Building Standards Code as follows:

All multifamily residential new construction with three units or more must comply with the following:

- a. The mandatory measures of the 2019 California Green Building Standards Code and any Mountain View amendments;
- b. Demonstrate energy compliance to meet or exceed Title 24, Part 6;
- c. 15 percent of the parking spaces shall be equipped with EV2 chargers installed and one Level 3/DC Fast Charger shall be provided for every 100 spaces’
- d. Installation of photovoltaic (PV) panels on 50 percent of roof area (a project may submit for an exception by providing documentation that the required percentage of PV installation will over-generate the kWh required to operate the proposed structure on an annual basis);
- e. Space-conditioning equipment shall be electric, not be fueled by natural gas;
- f. Water-heating systems and equipment shall be electric or solar, not be fueled by natural gas;
- g. Clothes dryers shall be electric, not be fueled by natural gas; and
- h. Cooking appliances and fireplaces shall be electric, not fueled by natural gas.

City of Mountain View Policies

Carbon Neutrality Resolution

In April 2020, the City Council passed a resolution for Mountain View to become a carbon neutral city by 2045. This means that in addition to achieving the adopted 2045 GHG reduction target of 75 percent below 2005 levels, Mountain View has committed to balancing any remaining GHG emissions with carbon sequestration projects (such as planting trees or restoring wetlands) and/or carbon offsets. In June 2022, the Council Sustainability Committee signaled support for investigating accelerating the carbon neutral target year from 2045 to 2035.

Electric Vehicle Action Plan

Finalized in December 2021, the Electric Vehicle Action Plan (EVAP; City of Mountain View, 2021b) is a high-level plan identifying strategies, policies, and programs to support electric vehicle adoption and deployment of Electric Vehicle (EV) charging infrastructure. Through a combination of policies, programs, and infrastructure, the EVAP aims to create a decarbonized system that supports equitable access to the benefits of clean transportation. The actions recommended within the EVAP will be integrated into future planning, programming, and outreach.

Green Building

In June 2020, the City Council approved a new green building policy for City facilities. This policy requires a minimum of LEED® Gold certification for new facilities, as well as a consideration of the incremental cost and benefits for achieving LEED® Platinum certification during the design phase. For existing facilities, the policy requires City staff to analyze opportunities for electrification when major building systems are upgraded or equipment is replaced. Additionally, it requires new City facilities to incorporate on-site renewable energy systems to the extent feasible, with consideration of energy storage opportunities.

As discussed above, the MVGBC amends the State-mandated California Green Building Code (CALGreen) to include local green building standards and requirements for private development. The MVGBC is regularly updated to meet adopted CALGreen requirements as part of the tri-annual California Building Code updates.

Green Purchasing

In 2008, the City adopted the Environmentally Preferable Purchasing Policy (EPPP) that encourages City departments to purchase the most environmentally responsible products and services that meet performance needs, are competitively priced, and are readily available.

Zero Waste Plan 2019

In June 2018, the City Council adopted a Zero Waste Policy establishing a goal to divert 90 percent of waste from the landfill by 2030. In October 2019, the City Council approved a Zero Waste Plan in support of the Policy. This Zero Waste Plan 2019 (City of Mountain View, 2019c) describes actions the City can undertake to meet the goals adopted by the City to increase diversion of materials from landfill from the 2019 diversion rate of 78 percent to 80 percent by 2020 and 90 percent by 2030.

City of Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to GHG emissions, as summarized below.

Green Building – Residential New Construction

The project is required to meet the mandatory measures of the California Green Building Standards Code and meet the intent of the applicable GreenPoint Rated points. All mandatory prerequisite points and minimum point totals per category to attain GreenPoint Rated status must be achieved, unless specific point substitutions or exceptions are approved by the Community Development Department. Formal project registration and certification through Build It Green is not required for compliance with the Mountain View Green Building Code (MVGBC). The project is also required to comply with Title 24, Part 6.

Transportation Demand Management (TDM) Program

The property owner, property manager(s), and homeowners association (HOA) or their representative(s) (collectively, “the owners”) are required to maintain a TDM program which provides commute and transportation alternatives to employees/residents of the project for the life of the project. The TDM program measures shall be formally accepted by the property owners prior to building permit issuance through a legal agreement or recorded document, as determined by the City Attorney, with contents to the satisfaction of the Zoning Administrator. The mandatory TDM measures for the project include:

- a. Join and maintain ongoing membership in the MVTMA for the life of the project.
- b. Provide and maintain maximum vehicle parking and minimum bike parking as approved in the project. Also must provide and/or maintain access to shared bicycles for residents/employees, if a bike-share service is not nearby.
- c. Provide conveniently located ride-share drop-off and waiting areas on-site.

- d. Provide and maintain shared, common, collaborative workspaces with WiFi for residents and their guests. This amenity can be offered in partnership with nearby residents and businesses.
- e. Provide monetary incentives for alternative mode of travel, such as subsidized transit passes or bike-share for residents and/or unbundled parking.
- f. Provide and maintain accessible and secure storage spaces for package delivery on-site.
- g. Provide local transportation information to all residents through a website, leasing office, and/or initial sale information.
- h. Support Safe Routes to Schools programs, including facilitating parent gatherings and coordination of walking, school buses, and/or bike trains.
- j. Other TDM measures as directed by the Planning Department.

4.7.4 Significance Criteria

The thresholds used to determine the significance of impacts related to GHGs are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Approach to Analysis

GHG emissions and global climate change represent cumulative impacts from human activities and development projects locally, regionally, statewide, nationally, and worldwide. GHG emissions from all of these sources cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from past, present, and future projects around the world have contributed and will continue to contribute to global climate change and its associated environmental impacts. There are currently no established thresholds for assessing whether the GHG emissions of a project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA, 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA. The method for evaluating GHG impacts in this EIR uses a qualitative consistency determination of the proposed HEU with the BAAQMD's recommended project-level GHG thresholds as discussed below. This evaluation is considered in a cumulative context, and because the analysis of GHG emissions is only relevant in a cumulative context, a project-specific impact assessment is not required.

The CEQA Guidelines do not prescribe specific methods for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methods and thresholds of significance consistent with various factors prescribed by

CEQA Guideline 15064.4. The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor’s Office of Planning and Research’s Technical Advisory, titled *Discussion Draft CEQA and Climate Change Advisory* (OPR, 2018), states that:

[N]either the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that “in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a ‘significant impact,’ individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice.” Section 15064.7(c) of the CEQA Guidelines specifies that “when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

GHG Emissions

The City, as the lead agency, has discretion to choose thresholds of significance, including thresholds adopted or recommended by other agencies or recommended by experts, such as those recommended by the BAAQMD, provided the lead agency’s decision to use such thresholds is supported by substantial evidence (OPR, 2018). As discussed earlier, in April 2022, the BAAQMD adopted the following new significance thresholds that address the State’s SB 32 GHG reduction goals and carbon neutrality goal for 2045, as stipulated in Executive Order B-55-18. BAAQMD also published a Justification Report that provides the substantial evidence that lead agencies will need to support their use of these thresholds (BAAQMD, 2022).

The recommended plan-level GHG thresholds proposed by the BAAQMD are as follows:

- A. Meet State’s goals to achieve emissions 40 percent below 1990 levels by 2030, and carbon neutrality by 2045; OR
- B. Be consistent with a local GHG Reduction Strategy that meets the criteria under CEQA Guidelines section 15183.5(b).

The recommended project-level GHG thresholds proposed by the BAAQMD are as follows:

- A. Projects must include, at a minimum, the following project design elements:
 - 1. Buildings
 - a. The project will not include natural gas appliances or natural gas plumbing (in both residential and non-residential development)
 - b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation

- a. Achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2
- b. Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent)

OR

Meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

- i. *Residential projects*: 15 percent below the existing VMT per capita
- ii. *Office projects*: 15 percent below the existing VMT per employee
- iii. *Retail projects*: no net increase in existing VMT

OR

- B. Be consistent with a local GHG Reduction Strategy that meets the criteria under the CEQA Guidelines section 15183.5(b).

The BAAQMD has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans and would be applicable to future projects proposed under the HEU.

The BAAQMD's plan-level recommended thresholds consider planning documents to have a less-than-significant climate impact if they demonstrate that GHG emissions from the jurisdiction will decline in accordance with California's GHG reduction targets of 40 percent below 1990 levels by 2030 and carbon neutrality by 2045 with the full implementation of the plan. However, this threshold merely reiterates the GHG reduction and carbon neutrality goals adopted by the State and does not provide a mechanism or metrics for plans to evaluate consistency with these goals. The City of Mountain View does not have a qualified GHG reduction plan that meets the criteria under CEQA Guidelines section 15183.5(b) and addresses SB 32 GHG reduction goals. For these reasons, to ensure consistency with State goals, project-level thresholds have been used in this analysis. Specifically, option (A) of the proposed project-level thresholds is used as the significance threshold in this EIR. Applying the BAAQMD's recommended project-level thresholds to the HEU in this analysis evaluates the capacity for all future projects proposed for development under the HEU to contribute their fair share GHG emission reductions to achieving the State's goals to achieve emissions 40 percent below 1990 levels by 2030 and carbon neutrality by 2045, as stipulated in BAAQMD's recommended plan-level threshold (A). This is the same logic that the BAAQMD is employing to determine the significance of project-level GHG emissions. In other words, if all future projects proposed for development under the HEU consume no natural gas (1)(a), avoid wasteful, inefficient, or unnecessary electrical usage (1)(b), comply with EV requirements in CALGreen Tier 2 (2)(a), and achieve the SB 743 target of 15 percent reduction in VMT per capita below the regional

average (2)(b), then collectively all projects would have a less-than-significant impact on climate change and would be consistent with the statewide targets for 2030 and 2045. The BAAQMD has provided the required substantial evidence for this argument in their justification report (BAAQMD, 2022). To summarize,

If a project is designed and built to incorporate these design elements, then it will contribute its portion of what is necessary to achieve California’s long-term climate goals—its “fair share”—and an agency reviewing the project under CEQA can conclude that the project will not make a cumulatively considerable contribution to global climate change. If the project does not incorporate these design elements, then it should be found to make a significant climate impact because it will hinder California’s efforts to address climate change.

Thus, the HEU itself would have a less-than-significant impact on climate change.

In summary, for purposes of this analysis, a significant GHG impact would be identified if development allowed by the HEU does not incorporate the following performance standards proposed by the BAAQMD:

- No natural gas to all projects proposed for development within the planning area;
- Avoid wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines;
- Compliance with EV requirements in the most recently adopted version of CALGreen Tier 2; and
- Consistency with the SB 743 target of at least 15 percent reduction in VMT per capita below regional average. This amounts to 11.46 miles per resident, which is 85 percent of the 2020 Bay Area regional average of 13.49 miles per resident.

Consistency with Plans, Policies, and Regulations for GHG Reduction

Further, the analysis also evaluates consistency with CEQA Guidelines Section 15064.4(b)(2) by considering whether the HEU would conflict with plan, policies and regulations adopted at the state, regional and local levels, adopted for the purpose of reducing GHG emissions, including but not limited to, the 2017 Scoping Plan Update, SB 37 and E-3-05, Plan Bay Area 2040, the City of Mountain View General Plan, City of Mountain View ESAP 4, and the CALGreen Code and City’s Green Building Codes.

4.7.5 Impacts of the Project

Impact GHG-1: Implementation of the HEU would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (*Less than Significant with Mitigation*)

GHG emissions from development proposed as part of the HEU would result in both direct and indirect emissions from construction and operational activities. Direct GHG emissions would be generated during construction would include emissions from the combustion of fuel (e.g.,

gasoline and diesel) in construction equipment and vehicles. Upon completion of construction, development projects would generate direct GHG emissions from area sources (such as landscaping equipment) and on-road motor vehicle trips. No direct GHG emissions would be generated from energy use in buildings for space and water heating because the City's Reach Code requires all new construction to be all-electric buildings with no natural gas infrastructure. Indirect operational GHG emissions would be generated from the increase in electricity use associated with building energy use along with water and wastewater treatment and conveyance.

For the evaluation of GHG impacts, the BAAQMD's recommended GHG thresholds address the two main direct sources of GHG emissions in land use development projects: building energy use and motor vehicle trips.

Compliance with No Natural Gas Requirement

As detailed in the Regulatory Setting, the City of Mountain View has adopted Reach Codes that amend articles I through XIV, Chapter 8 of the Mountain View City Code, relating to the adoption of the 2019 California Building Codes. Reach Codes are amendments to the Energy and Green Building Standards Codes to reduce GHG emissions and include requirements beyond those required by the current Energy Code. Section 8.20.9, which amends Subsection 101.10.1.1.3 includes a requirement for all multi-family new construction to all-electric buildings with no natural gas infrastructure for space conditioning, water heating, cooking or other appliances. This goes beyond the requirements in the 2022 Update to the Title 24 standards that will go into effect on January 1, 2023 and establish electric-ready requirements in new homes, but do not explicitly prohibit natural gas. The City's Reach Codes do not allow any exceptions to new residential structures. Therefore, development under the HEU would be required to meet the no natural gas requirement imposed by the City's Reach Codes and the Project would comply with BAAQMD GHG threshold A(1)(a).

Avoid wasteful, inefficient, or unnecessary electrical usage

As discussed under Impact ENE-1 in Section 4.5, *Energy*, development proposed as part of the HEU would not result in wasteful, inefficient, or unnecessary use of electricity. Compliance with the all-electric requirement in the City's Reach Codes and Tier 2 EV requirements in CALGreen discussed below would result in an increase in electricity use; however, as these requirements are in place to ensure that development proposed as part of the HEU and the region's compliance with the State's GHG reduction goals, the increase would not be considered wasteful, inefficient or unnecessary. In addition, the Reach Codes also include requirements for onsite photovoltaic systems, which would offset part of this increase. Compliance with Title 24 energy efficiency standards and the inherent location of the HEU sites in close proximity to transit facilities would also ensure that electricity usage associated with development under the HEU would not be wasteful, inefficient or unnecessary.

Future development proposed as part of the HEU would be served by SVCE, a CCA that provides electricity with at least 50 percent and up to 100 percent from renewable resources. Although using a CCA does not affect the amount of electricity used, the purpose of this requirement is to

reduce electricity-related GHG emissions, which a CCA would lessen or avoid independent of the amount of electricity consumed.

Compliance with Tier 2 EV Requirements in CALGreen

The 2019 California Green Building Standards Code (“CALGreen”, Title 24, Part 11) requires that new construction and major alterations include “EV Capable” parking spaces which have electrical panel capacity, a dedicated branch circuit, and a raceway to the EV parking spot to support future installation of charging stations. All new construction and qualifying additions or alterations must comply with mandatory 2019 CALGreen requirements. Mandatory 2019 CALGreen requirements applicable to residential uses are as follows:

- All new residential (single-family, townhomes & duplexes) construction must be EV capable. Each dwelling unit must have a listed raceway to accommodate a dedicated 208/40-volt branch circuit.
- Multifamily dwellings must provide at least 10 percent of the total parking spaces to be EV Capable.
- Accessory dwelling units without additional parking do not need to comply with EV charging requirements for new construction (e.g., guest houses).
- If guest parking is available, at least one “EV Capable” space must be for guest parking.

In addition to the mandatory requirements, the 2019 CALGreen Code encourages local jurisdictions to raise the sustainable goals by publishing two “voluntary” tiers of additional requirements, referred to as Tier 1 and Tier 2. Tier 1 adds additional requirements beyond the mandatory measures. Tier 2 further increases the requirements. The CALGreen tiers are only mandatory where local ordinances have specifically adopted them. Tier 2 EV requirements for residential uses include the provision of at least 20 percent of the total parking spaces as “EV Capable.”⁵

In October 2021, the CEC approved the 2022 CALGreen Building Standards Code which added to the 2019 CALGreen mandatory requirements. The 2022 CALGreen Code does not change the EV Capable percentages required for voluntary Tier 2 from the 2019 standards, but adds the requirement for chargers to be installed. For example, for multifamily buildings with 20 or more units, the 2022 CALGreen Code Tier 2 requires 15 percent of total parking spaces to have Electric Vehicle Charging Stations (EVCS) (California Housing and Community Development, n.d).

As part of the Reach Codes, the City has adopted requirements beyond mandatory 2019 CALGreen requirements. Multifamily residential buildings with more than three dwelling units are required to have at least 15 percent of the parking spaces to be installed with Level 2 EV chargers and a Level 3/DV Fast charger for every 100 spaces. The remaining parking spaces are required to be EV Ready. These requirements in the City’s Reach Codes exceed the requirements set forth in the 2019 CALGreen Tier 2 standards which require the provision of at least 20

⁵ “EV Capable” refers to a parking space that is linked to a listed electrical panel with sufficient capacity to provide at least 110/120 volts and 20 amperes to the parking space.

percent of the total parking spaces as “EV Capable.” The City’s EV charging infrastructure requirements in its Reach Codes also meet the 2022 CALGreen Tier 2 requirements which requires 15 percent of total parking spaces in multifamily residential developments to have EVCS. However, it cannot be ascertained that the City’s Reach Codes would ensure consistency with Tier 2 requirements in future CALGreen updates beyond 2022. According to the BAAQMD’s recommended GHG thresholds, subsequent projects in the HEU area would be required to show compliance with EV requirements in the version of CALGreen Tier 2 adopted at the time of project review. As discussed earlier, the CALGreen standards will continue to be updated on a triennial basis with evolving requirements for EV charging. Therefore, current compliance with requirements in the City’s Reach Codes would not ensure compliance with Tier 2 CALGreen requirements in future updates.

Consistency with SB 743 VMT Reduction Target of 15 percent below the regional average

As detailed earlier, with the adoption of SB 743, the State of California changed the method of traffic analysis required through CEQA for publicly- and privately-initiated projects. SB 743 requires project reviews under CEQA to evaluate the transportation impacts of new developments in terms of VMT, rather than on-road congestion and automobile delay. As described in Chapter 4.14, *Transportation*, and illustrated in Figure 4.14-4, most of the City and sites identified in the HEU housing sites inventory are located in low VMT areas, where the VMT per resident is 15 percent below the regional VMT per resident. Portions of the City and some housing inventory sites⁶ are located within areas where the VMT per resident is below the regional average, but greater than 15 percent below the average. Mitigation Measure TRA-1, Implement VMT Reduction Measures, along with implementation of Transportation Demand Management (TDM) Standards in the North Bayshore Precise Plan and East Whisman Precise Plan for projects located within those precise plan areas would ensure that VMT per resident would meet the 15 percent VMT reduction requirement stipulated in the BAAQMD’s recommended GHG thresholds.

Because compliance with the City’s Reach Codes does not ensure compliance with future updates to the CALGreen Tier 2 EV requirements, the proposed HEU would not comply with BAAQMD’s recommended GHG threshold A(2)(a), and thus would result in a *potentially significant* impact, requiring mitigation.

Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2.

Subsequent development projects proposed as part of the HEU shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.

Mitigation Measure TRA-1: Implement VMT Reduction Measures. (See Impact TRA-2 in Chapter 4.14, *Transportation*)

⁶ These sites are primarily located within the North Bayshore and East Whisman Precise Plan areas, south of US-101 in the vicinity of Rengstorff Avenue, and in a portion of Downtown Mountain View.

Significance after Mitigation: With the implementation of Mitigation Measure GHG-1 and TRA-1, all future projects proposed for development pursuant to the HEU would be consistent with the BAAQMD’s recommended GHG significance thresholds. Compliance with these thresholds would mean that these projects would not generate GHG emissions either directly or indirectly, that would have a significant impact on the environment. Therefore, this impact would be considered *less than significant with mitigation*.

Impact GHG-2: Implementation of the HEU would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (*Less than Significant with Mitigation*)

CARB 2017 Scoping Plan Update, SB 32 and EO S-3-05

The 2017 Scoping Plan Update adopted by CARB establishes the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan Update includes local actions that land use development projects and municipalities can implement to support the statewide goal. The 2017 Scoping Plan Update also illustrates in Figure 5 that achieving the 2030 target is consistent with progress toward achieving the 2050 level included in EO S-3-05 and that depending on the success in achieving the 2030 target, it may be possible to achieve the 2050 target earlier than EO S-3-05 (CARB, 2017). The BAAQMD’s draft recommended project-level GHG CEQA thresholds are designed to demonstrate consistency with CARB’s 2017 Scoping Plan Update and the statewide goal of carbon neutrality by 2045 pursuant to EO B-55-13 for new projects and plans. As described under Impact GHG-1, with the implementation of Mitigation Measure GHG-1, the proposed HEU would be consistent with all four design elements included in BAAQMD’s draft proposed GHG thresholds. Therefore, implementation of the HEU would also be consistent with the statewide emissions reduction goal for 2030 required by SB 32 and achieved through the 2017 Scoping Plan Update.

The 2017 Scoping Plan Update incorporates a broad array of regulations, policies, and state plans designed to reduce GHG emissions. GHG reduction actions could be implemented by local governments and that are applicable to the construction and operation of development proposed under the HEU are listed in **Table 4.7-3**. Actions, plans, and programs that are not under the control or influence of local jurisdictions, such as the Cap-and-Trade program, are not included in the table.

**TABLE 4.7-3
 CONSISTENCY WITH APPLICABLE GHG REDUCTION ACTIONS IN 2017 SCOPING PLAN UPDATE**

Sector / Source	Category / Description	Consistency Analysis
Energy and Water		
California Renewables Portfolio Standard (RPS) and SB 100	SB 100 requires that the proportion of electricity from renewable sources be 60 percent renewable power by 2030 and 100 percent renewable power by 2045.	Consistent. Electricity supplied to development proposed under the HEU would be provided by Pacific Gas and Electric (PG&E) and Silicon Valley Clean Energy (SVCE). PG&E and SVCE are required to comply with SB 100 and the RPS.
California Renewables Portfolio Standard and SB 350	SB 350 requires that the proportion of electricity from renewable sources be 50 percent renewable power by 2030 (superseded by SB 100). It also requires the state to double the energy efficiency savings in existing final end uses of electricity and natural gas by retail customers through energy efficiency and conservation.	Consistent. Electricity to development proposed as part of the HEU would be provided through PG&E and SVCE. PG&E and SVCE are required to comply with both the RPS and SB 350 and will meet these standards.
California Building Efficiency Standards (CCR, Title 24, Part 6)	Energy Efficiency Standards for Residential and Nonresidential Buildings	Consistent. Buildings constructed under the proposed HEU would be designed to comply with the most recent version of Title 24 Building Energy Efficiency Standards at the time of individual project review.
California Green Building Standards Code (CCR, Title 24, Part 11 - CALGreen)	California's Green Building Standards (CALGreen) Code includes energy and water efficiency requirements, as well as waste management and other design regulations that apply to residential and nonresidential buildings.	Consistent. Buildings constructed as part of the HEU would comply with mandatory CALGreen measures. In addition, Mitigation Measure GHG-1 would go beyond mandatory CALGreen measures to require voluntary Tier 2 EV charging requirements for all development allowed under the HEU.
Senate Bill X7-7	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal.	Consistent. Water to development as part of the HEU would be supplied by the City's Public Services Division, which is required to comply with SB X7-7 standards.
Advanced Clean Cars Program (ACC) and Mobile Source Strategy (MSS)	In 2012, CARB adopted the ACC program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC requires the reduction of criteria pollutants and GHG emissions from light- and medium-duty vehicles. ACC also includes the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The Mobile Source Strategy (2016) calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) on the road by 2025, and 4.2 million ZEVs by 2030.	Consistent. These standards would apply to all vehicles used by future residents of development within the HEU, and to construction workers traveling to and from the construction sites as required by CALGreen. In addition, Mitigation Measure GHG-1 would go beyond mandatory CALGreen regulatory requirements for EV charging infrastructure to require voluntary Tier 2 requirements for all development allowed under the HEU and would therefore accommodate future EV charging stations.

TABLE 4.7-3 (CONTINUED)
CONSISTENCY WITH APPLICABLE GHG REDUCTION ACTIONS IN 2017 SCOPING PLAN UPDATE

Sector / Source	Category / Description	Consistency Analysis
Mobile Sources		
SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state’s Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. CARB’s current targets call for the Bay Area to reduce per-capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline.	Consistent. Development under the proposed HEU would be consistent with MTC and ABAG Plan Bay Area 2040 goals and objectives under SB 375 to implement “smart growth.” The HEU identifies housing sites in infill locations with access to public transportation which would reduce reliance on automobiles, thereby reducing VMT and associated GHG emissions. The VMT generated per capita with the HEU is projected to be less than 85 percent of the Bay Area regional average. The 2020 Bay Area region wide average is estimated to be 13.49 miles per resident. Based on the transportation analysis for the HEU, development proposed under the HEU would result in 9.37 miles per resident. This would be less than 11.46 miles per resident, which is 85 percent of the Bay Area regional average.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and AB 341	IWMA requires all California cities to divert 50-percent of all solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. Recology Mountain View provides solid waste and residential recycling services to the city of Mountain View and is responsible for recycling and solid waste management in the City. Recology’s services yield waste diversion results consistent with citywide recycling targets. These services would be available to all future development under the HEU.

As shown above, the HEU would implement all applicable actions identified in the 2017 Scoping Plan Update to reduce energy use, conserve water, reduce waste generation, promote EV use, and reduce vehicle travel consistent with statewide strategies and regulations. In addition, as detailed under Impact GHG-1, the HEU would be consistent with the BAAQMD’s updated GHG significance thresholds which in turn mean that the proposed HEU would be consistent with and contribute its fair share to the BAAQMD’s GHG reductions required to meet the statewide GHG reduction goal for 2030 pursuant to SB 32 and the 2017 Scoping Plan Update.

Although the HEU would not meet the EO B-55-13 target of carbon neutrality by 2045, carbon neutrality is not a significance threshold for the purposes of this SEIR because carbon neutrality is not an adopted plan, policy, or regulation of the State that is applicable to the City. In fact, the 2017 Scoping Plan Update explicitly acknowledges and states that the inability to achieve carbon neutrality or net zero GHG emissions does not imply that a project contributes to a significant impact under CEQA (CARB, 2017):

Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

As illustrated above in Table 4.7-3, the development proposed under the HEU would align with the 2017 Scoping Plan Update and would not conflict with achieving the SB 32 target or with making progress toward achieving the 2050 reductions included in EO S-3-05. The HEU makes progress towards carbon neutrality; however, its inability to achieve carbon neutrality by 2045 does not conflict with the 2017 Scoping Plan, and thus does not render the impact significant under CEQA.

Plan Bay Area 2040

Pursuant to SB 375, ABAG and the MTC adopted *Plan Bay Area 2040* to establish targets and strategies for meeting the region's needs for housing at all income levels, while reducing GHG emissions by private passenger cars and light-duty truck traffic. The core strategy of *Plan Bay Area 2040* is to encourage growth in existing communities along the existing transportation network, focusing new development in PDAs and TPAs in urbanized centers where more public transit and other mobility options are available to reduce the use of cars and light trucks. In addition to encouraging focused growth through significant transit and roadway performance investments, *Plan Bay Area 2040* directs funding to neighborhood active-transportation and complete-streets projects, climate initiatives, lifeline transportation and access initiatives, pedestrian and bicycle safety programs, and PDA planning.

The HEU would locate high density, transit-oriented housing in infill locations thereby reducing the number of vehicle trips and VMT. Many of the HEU housing sites are also located in a Priority Development Area and/or a Transit Priority Area. As discussed under Impact GHG-1, development in the HEU planning area would generate fewer miles per capita when compared to the regional average. The proposed HEU is therefore consistent with *Plan Bay Area 2040*.

City of Mountain View Climate Action Planning

As discussed under the *Regulatory Setting*, the City's Climate Protection Roadmap is not a plan in and of itself, but an analysis that may be used by City officials to evaluate the potential for long-term communitywide emission reduction initiatives moving forward. Due to the high-level nature of the analysis, the CPR does not explicitly direct implementation of any specific city actions.

The City's current Sustainability Action Plan (SAP-4) is a 3-year plan to ensure the City's progress towards its ultimate goal of reducing the City's GHG emissions by 80 percent from 2005 levels by 2050. SAP-4 prioritizes actions in two major sectors: transportation and natural gas use, to achieve both immediate GHG reductions and also enable future reductions. Transportation is the largest source of GHG emissions in Mountain View and the SAP-4 includes actions that reduce vehicle miles traveled and promote EVs and EV charging infrastructure. The HEU would be consistent with these actions as it would generate VMT per capita 15 percent less than the Bay Area regional average as discussed under Impact GHG-1. The HEU would also exceed requirements for EV charging infrastructure in the both the current (2019) CALGreen codes and the City's Reach Codes. With implementation of Mitigation Measure GHG-1, all future development would be required to meet the CALGreen Tier 2 requirements in future updates to the code. In response to SAP-4, the City adopted the Reach Code requiring building electrification to reduce GHG emissions from natural gas combustion in buildings. Consistent with the Reach Code, all future development under the HEU would be required to be all-electric

and therefore be consistent with actions related to natural gas identified in the SAP-4. Therefore, the HEU would be consistent with actions identified in the current SAP-4.

CALGreen Code and City of Mountain View Reach Codes

Development proposed under the HEU would be required to comply with the most recent update to the CALGreen Code. All projects would also be required to comply with the City's Reach Codes that aim to achieve energy savings and GHG reductions beyond the state's minimum requirements. In addition, Mitigation Measure GHG-1 would require projects to comply with Tier 2 EV charging requirements in the CALGreen code applicable at the time of project review.

Conclusion

As described above, with adoption of Mitigation Measure GHG-1, the HEU would not conflict with the GHG reduction targets established by Executive Order S-3-05, and SB 32, or the reduction measures identified in CARB's 2017 Scoping Plan. In addition, the HEU would not conflict with Plan Bay Area or the Mountain View Climate Protection Roadmap, and would be subject to measures in the CALGreen Code and the City's Reach Codes.

Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2. (See Impact GHG-1 above)

Mitigation Measure TRA-1: Implement VMT Reduction Measures. (See Impact TRA-2 in Chapter 4.14, *Transportation*)

Significance after Mitigation: Implementation of Mitigation Measure GHG-1 would ensure the HEU's consistency with BAAQMD GHG threshold A(2)(a) by requiring future development under the HEU to comply with the EV charging infrastructure requirements in the version of CALGreen standards in place at the time of individual project review. The HEU would be consistent with the other three GHG thresholds recommended by the BAAQMD. With implementation of Mitigation Measure GHG-1, the HEU would be consistent with the updated GHG thresholds recommended by the BAAQMD to meet the state's GHG reduction and carbon neutrality goals in SB 32, EO B-55-13 and the 2017 Scoping Plan Update. Therefore, this impact would be *less than significant with mitigation*.

4.7.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to GHG could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

Impact GHG-1.CU: Implementation of the HEU, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases. (*Less than Significant with Mitigation*)

Global GHG emissions and global climate change are inherently a cumulative concern that is understood for CEQA purposes to be an existing significant and adverse condition. Accordingly, the significance of GHG emissions in this analysis is determined based on whether such emissions would have a cumulatively considerable impact on global climate change. Because the geographic scope of cumulative impacts related to GHG emissions (i.e., global climate change) is global, this analysis evaluates the HEU's direct and indirect generation of GHG emissions which contribute to this cumulative impact. The California Air Pollution Control Officers' Association (CAPCOA) considers GHG impacts to be exclusively cumulative impacts, in that no single project could, by itself, result in a substantial change in climate. Therefore, the evaluation of cumulative GHG impacts presented in this section considers whether the HEU would make a considerable contribution to cumulative emissions of GHG. As discussed under Impacts GHG-1 and GHG-2, implementation of the HEU would result in less than significant impacts with implementation of Mitigation Measure GHG-1 by ensuring consistency with all four GHG thresholds recommended by the BAAQMD which would in turn ensure consistency with the state's GHG reduction and carbon neutrality goals for 2030 and beyond. Therefore, the HEU would also be consistent with the 2017 Scoping Plan Update that was adopted by CARB to meet the state's GHG reduction and carbon neutrality goals. Further, development proposed under the HEU would also be consistent with the development assumptions of Plan Bay Area 2040 which is the Bay Area regional plan to meet the region's needs for housing, while reducing GHG emissions from transportation sources. Given that GHG emission impacts are cumulative in nature, the HEU's incremental contribution to significant cumulative GHG emissions would therefore not be cumulatively considerable, and the cumulative impact of GHG emissions generated by the HEU would be *less than significant with mitigation*.

Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2. (See Impact GHG-1 above)

Mitigation Measure TRA-1: Implement VMT Reduction Measures. (See Impact TRA-2 in Chapter 4.14, *Transportation*)

Significance After Mitigation: Less than Significant.

4.7.7 Summary of GHG Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact GHG-1: Implementation of the HEU would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Potentially Significant	Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2 Mitigation Measure TRA-1: Implement VMT Reduction Measures	Less than Significant
Impact GHG-2: Implementation of the HEU would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Potentially Significant	Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2 Mitigation Measure TRA-1: Implement VMT Reduction Measures	Less than Significant
Impact GHG-1.CU: Implementation of the HEU, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, would result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases.	Potentially Significant	Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2 Mitigation Measure TRA-1: Implement VMT Reduction Measures	Less than Significant

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4.8 Hazards and Hazardous Materials

4.8.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts relative to hazards and hazardous materials. This section first includes a description of the existing environmental setting as it relates to hazards and hazardous materials, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project relative to hazards and hazardous materials. The locations of each of the proposed HEU housing sites are shown on Figure 3-3.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022, and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to hazards and hazardous materials received during the NOP comment period include concerns related to existing hazardous materials sites that have had releases and to any housing sites near a closed landfill north of Highway 101.

4.8.2 Environmental Setting

Hazardous Materials Sites

GeoTracker and EnviroStor Hazardous Materials Sites

Active and closed hazardous materials sites that have reported spills or releases are tracked on the State Water Resources Control Board (SWRCB) GeoTracker and Department of Toxic Substances Control (DTSC) EnviroStor websites, which can be viewed simultaneously. The types of GeoTracker cleanup sites include leaking underground storage tank (LUST) sites (i.e., non-military UST sites that have had an unauthorized release [i.e. leak or spill] of a hazardous substance, usually gasoline, diesel, and/or motor oil), cleanup program sites (i.e., pesticide and fertilizer facilities, railyards, ports, equipment supply facilities, metals facilities, industrial manufacturing and maintenance sites, dry cleaners, bulk transfer facilities, refineries, mine sites, landfills, RCRA/CERCLA cleanups, and some brownfields), military cleanup sites (i.e., all cleanup sites located on existing or to-be-transferred military bases). The sites listed on the EnviroStor website are more focused on hazardous waste facilities and sites with known contamination, typically mostly focused on soil and soil vapor contamination. DTSC also typically regulates cleanups at leaking dry cleaner sites.

Figure 4.8-1, Hazardous Materials Cleanup Sites, overlays the cleanup sites as of April 27, 2022, on the proposed HEU housing site areas. Cleanup sites with an “x” through the symbol are sites that have been cleaned up and their case closed by the overseeing regulatory agency (i.e., the DTSC, or Regional Water Quality Control Board [RWQCB], or the Santa Clara County Department of Environmental Health [SCDEH]). Case closure means that the regulatory agency has concluded that the particular cleanup site has been cleaned up to a level that no longer poses a risk to people or the environment. This also means that residual levels of contamination below regulatory action levels may remain at the given cleanup site.

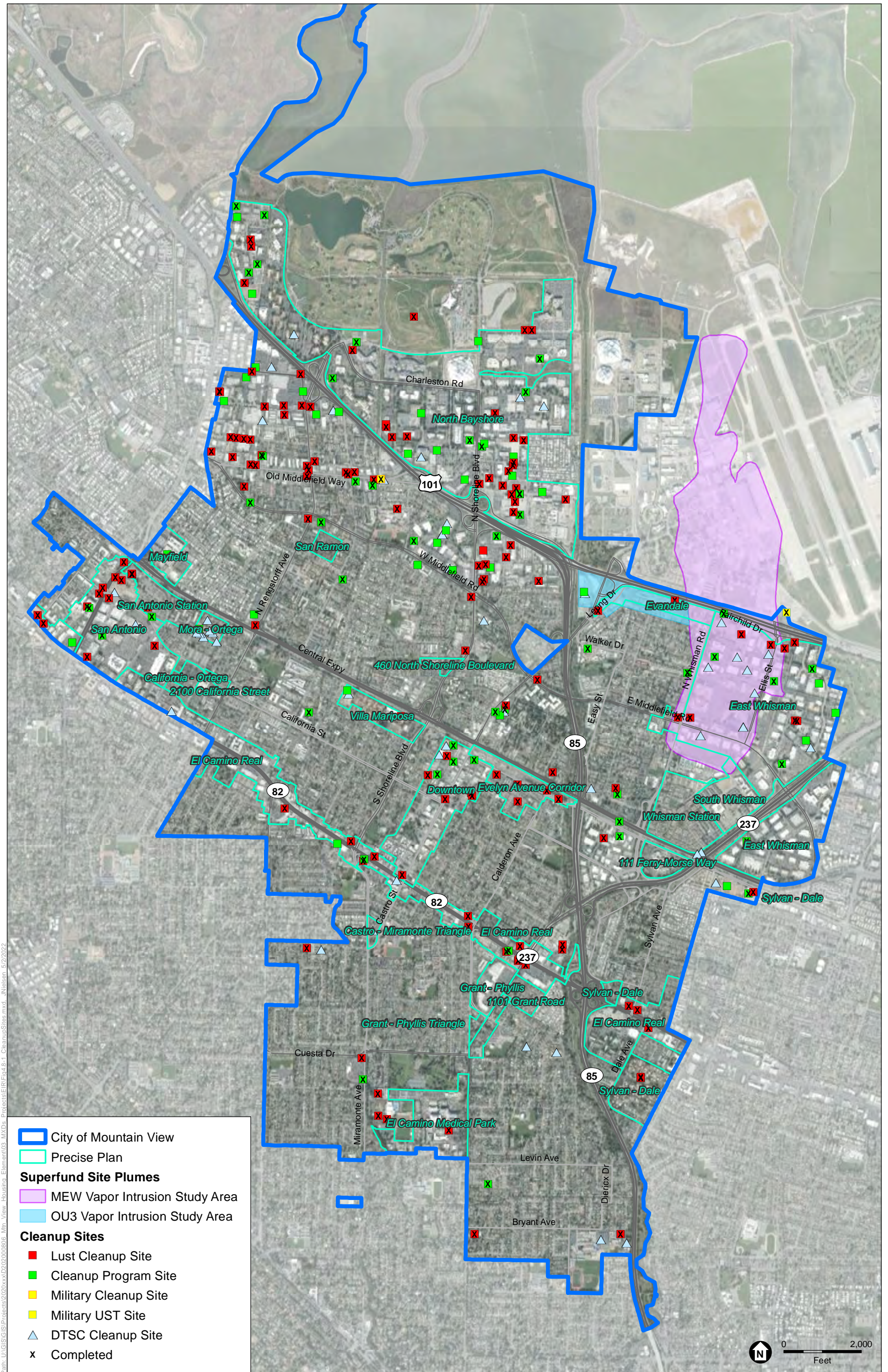
As shown, almost all of the areas identified for housing as part of the HEU have one or more cleanup sites within or near the housing site footprint. The sites identified as open sites are undergoing investigation and cleanup as of April 27, 2022. As discussed in Section 3.0, *Project Description*, the timing of the construction of specific housing sites is unknown at this time. Consequently, cleanup at the currently listed active cleanup sites may be completed by the time a particular HEU housing site is constructed. Alternately, new hazardous materials spill sites may be identified in the future that are at or near a proposed HEU housing site.

Middlefield-Ellis-Whisman (MEW) Study Area Groundwater Plume

In the 1960s and 1970s, several industrial companies involved in the semiconductor, electronics, and other manufacturing and research in the Mountain View and Moffett Field area used volatile organic compounds (VOCs), primarily trichloroethene (TCE), as cleaning solvents (USEPA 2019). Leakage from storage containers and piping resulted in the contamination of groundwater with TCE and its degradation byproducts of cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-DCE, and vinyl chloride. The affected area is referred to as the Middlefield-Ellis-Whisman (MEW) Superfund Study Area. The MEW Superfund Study Area is named for the three streets that generally bound the source areas of this contamination: Middlefield Road, Ellis Street, and Whisman Road. It includes three separate Superfund sites: Fairchild Semiconductor Corporation; Raytheon Company; and Intel Corporation; and portions of the former Naval Air Station (NAS) Moffett Field Superfund Property. The companies responsible for the soil and groundwater contamination are investigating and cleaning up the MEW Superfund Site but no longer own or operate their former facilities. Figure 4.8-1 includes the footprints of two areas under investigation and cleanup that are located in Mountain View. These areas have TCE and other VOCs contamination in the shallowest aquifer. VOCs are volatilizing out of the groundwater in the aquifer into a gaseous state, which has resulted in potential vapor intrusion into breathing spaces of overlying structures. Portions of the areas identified for housing as part of the HEU sites would overlie the MEW Site Vapor Intrusion Study Area, shown in pink and the Operational Unit 3 (OU3) Vapor Intrusion Evaluation Area, shown in blue.

For the HEU areas that overlie the MEW Superfund site, the depth to groundwater in the shallowest aquifer is 18 to 24 feet below the ground surface (bgs). The cleanup level for TCE in groundwater is 5 micrograms per liter ($\mu\text{g/L}$). The concentration of TCE in groundwater is as high as 6,000 $\mu\text{g/L}$. The cleanup level for TCE in soil gas is 5 micrograms per cubic meter ($\mu\text{g/m}^3$) for commercial land uses and 1 $\mu\text{g/m}^3$ for residential land uses. In soil gas samples, the maximum concentration of TCE in soil gas is as high as 110,000 ($\mu\text{g/m}^3$) and maximum TCE soil gas concentrations at 410,000 $\mu\text{g/m}^3$ have been detected. Further discussion regarding cleanup levels is provided below in Section 4.8.3, *Regulatory Setting, MEW Vapor Intrusion Study Area Requirements*.

For buildings overlying shallow groundwater contamination, the vapor intrusion study area shown on Figure 4.8-1 was designated by the USEPA in 2010 to prevent site contamination from vapor intrusion into buildings. The USEPA determined that vapor intrusion response actions were necessary to protect the health of building occupants in the vapor intrusion study area from actual or threatened releases of hazardous substances into the environment via the subsurface vapor intrusion pathway. The associated clean-up actions, which supplement already ongoing soil and groundwater clean-up work at MEW, represent one of the largest Superfund vapor intrusion clean-ups to date.



Path: U:\GIS\GIS\Projects\2020\02\02000806_Mtn_View_Housing_Element\03_MXD\Projects\ER\Fig4.8-1_CleanupSites.mxd, JNielsen, 5/2/2022

SOURCE: XXX

City of Mountain View

Figure 4.8-1
Hazardous Materials Cleanup Sites



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The USEPA's selected remedy to address vapor intrusion and protect the health of building occupants in the vapor intrusion study area consists of the following:

- ***For Existing Buildings*** – The appropriate response action is determined by indoor air sampling and other lines of evidence for each building. If necessary, installation, operation, maintenance, and monitoring of an appropriate sub-slab/sub-membrane ventilation system.
- ***Alternative for Existing Commercial Buildings*** – Use of building's indoor air mechanical ventilation system if the property/building owner agrees to use, operate, and monitor the system to meet remedy performance criteria and the remedial action objectives.
- ***For Future (New Construction) Buildings*** – Installation of a vapor barrier and passive subslab ventilation system (with the ability to be made active).
- ***Implementation of institutional controls (ICS)*** and monitoring to ensure the long-term effectiveness of the remedy.

Hazardous Building Materials in Existing Structures

While some of the sites identified in the housing sites inventory are vacant, some locations may require the removal of existing structures. Older structures in the areas identified for housing as part of the HEU, if constructed prior to 1978, may include asbestos-containing materials (ACMs) in building materials such as roofs, tiling, and insulation. ACMs are of concern because exposure to ACMs has been linked to cancer.

Lead was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950 (lead-based paint [LBP]). In 1972, the Consumer Products Safety Commission limited lead content in new paint to 0.5 percent, and to 0.06 percent in 1978. Similar to ACMs in buildings, lead may be present in older buildings within the areas identified for housing as part of the HEU and exposure to LBP has been linked to cancer.

Agricultural Pesticides

Pesticides containing metals such as arsenic, mercury, copper, and lead were utilized in agriculture prior to 1950. Then, DDT (dichloro-diphenyl-trichloroethane) and chlordane pesticides were used from 1950 to the mid-1970's. Many areas in the City were primarily agricultural from 1939 to 1968. Soils in the areas identified for housing as part of the HEU may contain residual pesticide contamination from previous agricultural activities.

Proximity to Schools

The following public schools are located in Mountain View:

- Stevenson Elementary School at 750 San Pierre Way
- Theuerkauf Elementary School at 1625 San Luis Avenue
- Waldorf School of the Peninsula at 180 North Rengstorff Avenue
- Landels Elementary School at 115 West Dana Street
- Mariano Castro Elementary School at 500 Toft Street

- St. Joseph Mountain View at 1120 Miramonte Avenue
- Monta Loma Elementary at 460 Thompson Avenue
- Springer Elementary School at 1120 Rose Avenue
- Benjamin Bubb Elementary School at 525 Hans Avenue
- Amy Imai Elementary School (previously Huff) at 253 Martens Avenue

Proximity to Airports

Moffett Federal Airfield is located just east of the HEU housing area in the North Bayshore neighborhood and north of the HEU housing areas in the Moffett/Whisman Road neighborhood (Windus 2016b). The Moffett Airport Protection Zone extends 2,500 feet south of the southern end of the airport but does not extend over any HEU housing area. However, Federal Regulation Title 14 Part 77 (FAR Part 77) establishes standards and notification requirements for objects affecting navigable airspace, including the height of structures within the navigable airspace. The FAR Part 77 Surface for Moffett Federal Airfield ranges from 182 feet to 382 feet over all of the HEU housing areas, except for some of the HEU housing areas west of Shoreline Boulevard, as shown on **Figure 4.8-2, FAR Part 77 Surface**. No buildings would be allowed in HEU housing areas higher than 182 to 382 feet above mean sea level without FAA approval.

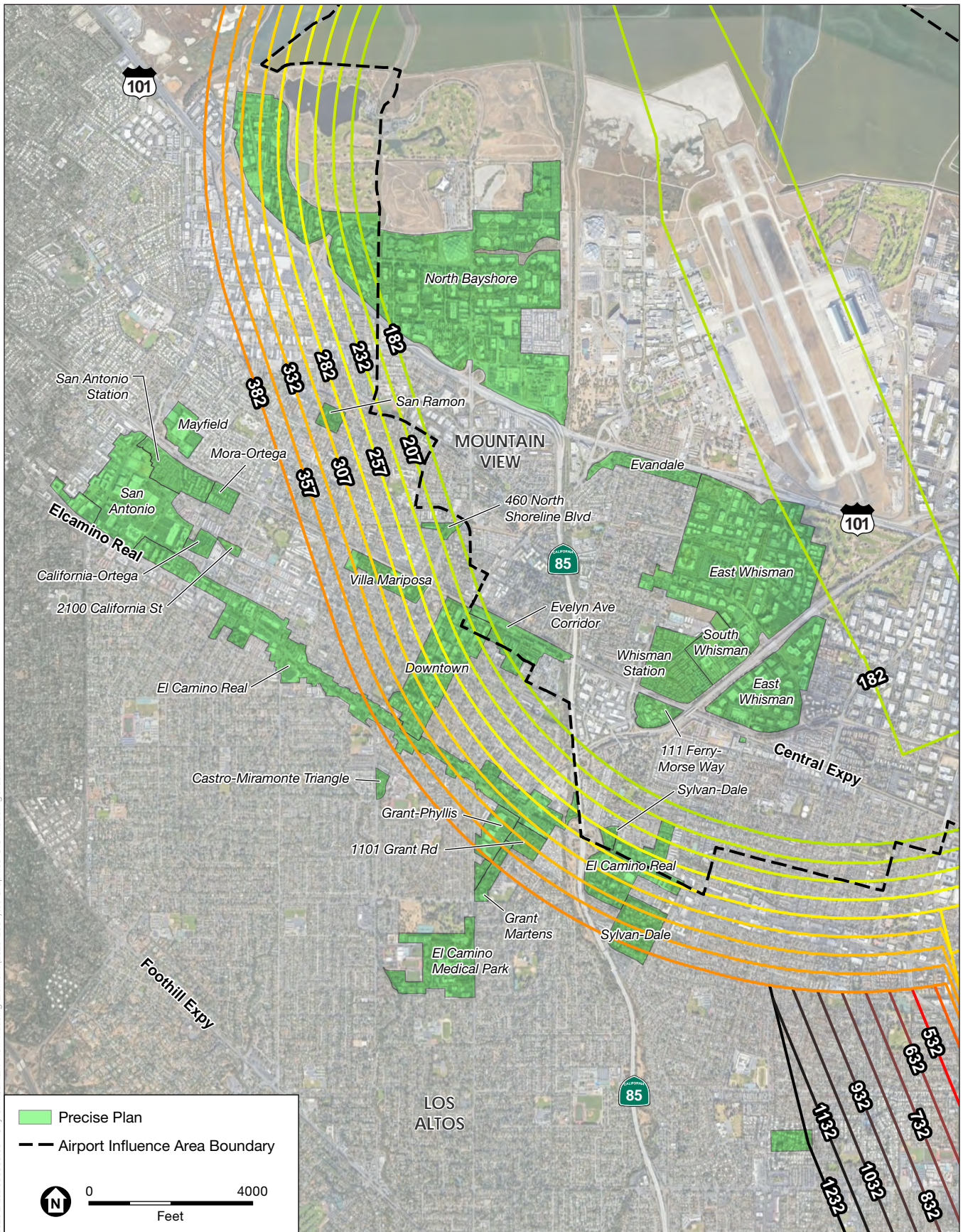
The Airport Influence Area (AIA), also shown on Figure 4.8-2, is a composite of the areas surrounding the airport that are affected by noise, height, and safety considerations. Within the AIA, actions, regulations, and permits must be evaluated by local agencies to determine how Comprehensive Land Use Plan (CLUP) policies may impact the proposed development, including HEU housing.

The Palo Alto Airport is located about 1.8 miles northwest of the North Bayshore neighborhood (Windus 2016a). The Airport Protection Zone extends 1,000 feet southeast of the southeast end of the airport and does not extend over any of the HEU housing areas. The FAR Part 77 Surface and AIA also do not extend to over any of the HEU housing areas.

Emergency Response or Evacuation Plans

The County of Santa Clara Office of Emergency Services (OES) adopted an Emergency Operations Plan (EOP) in 2017 (County of Santa Clara 2017). The plan aligns with the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS). It facilitates multi-agency and multi-jurisdictional coordination during emergency operations, public information functions, and resource management.

The plan provides Emergency Operations Center (EOC) responders with procedures, documentation, and checklists to effectively manage emergencies, and it also provides detailed information of supplemental requirements such as public information, damage assessment, and recovery operations. The EOP does not identify specific emergency response or evacuation routes; the routes depend on the location and nature of the emergency.



20201020200000600 - City of Mountain View Housing Element (2023-2031)05 Graphics-GIS-Modeling/Illustrator

SOURCE: Windus 2016

City of Mountain View Housing Element Update

Figure 4.8-2
FAR Part 77 Surface



In the City, the Mountain View Fire Department and OES are responsible for responding to disasters or other large-scale emergencies. The OES Emergency Plan includes emergency response protocols and procedures within Mountain View. In the areas identified for housing as part of the HEU, the commuter train (VTA Light Rail), US 101, and State Route 237 could be used as evacuation routes.

Wildland Fires

The California Department of Forestry and Fire Protection (Calfire) maps areas of significant fire hazard based on fuels, terrain, weather and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings. The City of Mountain View is not located within a High Fire Hazard Severity Zone (Calfire, 2007, 2008).

4.8.3 Regulatory Setting

Federal

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (USEPA), U.S. Department of Labor Occupational Safety and Health Administration (Fed/OSHA), and the U.S. Department of Transportation (USDOT). Federal laws, regulations, and responsible agencies are summarized in **Table 4.8-1**.

**TABLE 4.8-1
 FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

Classification	Law or Responsible Federal Agency	Description
Hazardous Materials Management	Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA))	Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.
Hazardous Waste Handling	Resource Conservation and Recovery Act of 1976 (RCRA)	Under RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste from "cradle to grave."
	Hazardous and Solid Waste Act	Amended RCRA in 1984, affirming and extending the "cradle to grave" system of regulating hazardous wastes. The amendments specifically prohibit the use of certain techniques for the disposal of some hazardous wastes.
Hazardous Materials Transportation	USDOT	USDOT has the regulatory responsibility for the safe transportation of hazardous materials. The USDOT regulations govern all means of transportation except packages shipped by mail (49 CFR).
	U.S. Postal Service (USPS)	USPS regulations govern the transportation of hazardous materials shipped by mail.
Occupational Safety	Occupational Safety and Health Act of 1970	Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR 1910).

TABLE 4.8-1 (CONTINUED)
FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT

Classification	Law or Responsible Federal Agency	Description
Fire Code	2000 Uniform Fire Code and Standards	The Uniform Fire Code establishes standards for fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, wine caves, hazardous materials storage and use, provisions intended to protect and assist first responders, industrial processes, and many other general and specialized fire-safety elements for new and existing buildings and premises.
Airports	Federal Aviation Administration (FAA)	Restrictions on the height of buildings, antennas, trees, and other objects near Moffett Federal Airfield and the Palo Alto Airport are regulated by the Federal Aviation Administration (FAA), Federal Aviation Regulations (FAR) Part 77. The FAR Part 77 map is used by the FAA and the Santa Clara County Airport Land Use Commission (ALUC) to identify potential obstructions and hazards to aviation traffic. A Comprehensive Land Use Plan (CLUP) has been prepared by the Santa Clara County Airport Land Use Commission (ALUC). The CLUP seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace.

State and local agencies often have either parallel or more stringent rules than federal agencies. In most cases, state law mirrors or overlaps federal law and enforcement of these laws is the responsibility of the state or of a local agency to which enforcement powers are delegated. For these reasons, the requirements of the law and its enforcement are discussed under either the State or local agency section.

State

The primary State agencies with responsibility for hazardous materials management in the region include the DTSC and the RWQCB within the California Environmental Protection Agency (Cal EPA), California Occupational Safety and Health Administration (Cal/OSHA), California Department of Health Services (CDHS), California Highway Patrol (CHP), and the California Department of Transportation (Caltrans). State laws, regulations, and responsible agencies are summarized in **Table 4.8-2**.

**TABLE 4.8-2
 STATE LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

Classification	Law or Responsible State Agency	Description
Hazardous Materials Management	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program); CUPA (Health and Safety Code Sections 25404 et seq)	In January 1996, Cal EPA adopted regulations, which implemented a Unified Program at the local level. The agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA), which for Santa Clara County is the Santa Clara County Hazardous Materials Compliance Division (HMCD).
	California Fire Code, Title 24, Chapter 9 of the California Code of Regulations	The California Fire Code regulates the storage and handling of hazardous materials, including the requirement for secondary containment, separation of incompatible materials, and preparation of spill response procedures.
Hazardous Waste Handling	California Hazardous Materials Release Response Plan and Inventory Law of 1985; CUPA	The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials onsite prepare a Hazardous Materials Business Plan (HMBP) and submit it to the local CUPA, which in this case is the HMCD.
	California Hazardous Waste Control Act; DTSC	Under the California Hazardous Waste Control Act, California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq., DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills. DTSC is also the administering agency for the California Hazardous Substance Account Act. California Health and Safety Code, Division 20, Chapter 6.8, Sections 25300 et seq., also known as the State Superfund law, providing for the investigation and remediation of hazardous substances pursuant to State law.
Hazardous Materials Transportation	Titles 13, 22, and 26 of the California Code of Regulations	Regulates the transportation of hazardous waste originating in and passing through the state, including requirements for shipping, containers, and labeling.
	CHP and Caltrans	These two state agencies are primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.
Occupational Safety	Cal/OSHA	Cal/OSHA has primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the Code of Federal Regulations (CFR). Cal/OSHA standards are generally more stringent than federal regulations.
	Cal/OSHA regulations (Title 8 CCR)	Concerning the use of hazardous materials in the workplace require employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.

TABLE 4.8-2 (CONTINUED)
STATE LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT

Classification	Law or Responsible State Agency	Description
Construction Storm Water General Permit (Construction General Permit; Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ)	RWQCB	Dischargers whose project disturbs one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the <i>NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities</i> (Construction General Permit; Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Construction activity subject to this permit includes clearing, grading, grubbing, and other disturbances to the ground such as excavation and stockpiling, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving offsite into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area
Municipal Separate Storm Sewer System (MS4) Permit NPDES No. CAS612008 and Order No. R2-2022-0018	RWQCB	The MS4 permit requires permittees of the San Francisco Bay Region Municipal Regional Permit, including Mountain View, to reduce pollutants and runoff flows from new development and redevelopment using BMPs to the maximum extent practical. The MS4 permittee also has its own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification element. The MS4 permit requires specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.
Underground Infrastructure	California Code of Regulations Section 4216-4216.9	Section 4216-4216.9 "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

Summary of Federal and State Hazardous Building Materials Regulations

As discussed in Section 4.8.2, *Environmental Setting*, existing structures that are removed as part of HEU housing projects may contain hazardous building materials. The above-listed federal and state regulations in Tables 4.8-1 and 4.8-2 list the overall regulations that regulate hazardous materials. Within those regulations are the specific hazardous materials regulations cited below that are relevant to the demolition of structures that have hazardous building materials as part of their structures.

- **ACM:** CCR Title 8, Division 1, Chapter 4, Article 4, Sections 1529 and 5208; BAAQMD Regulation 11, Rule 2

- **LBP:** CCR Title 8, Division 1, Chapter 4, Article 4, Section 1532.1
- **PCBs:** RCRA: 40 CFR 761; TSCA: 15 USC 2695; California: CCR Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
- **Mercury and/or PCBs in light tubes and switches:** CCR Title 22, Division 4.5, Chapter 12, Article 1, Sections 66262.11; 66273 et sec; and CCR Title 22, Division 4.5, Chapter 42, Sections 67426.1 through 67428.1
- **Freon (chlorofluorocarbon and hydrochlorofluorocarbon refrigerants):** California Health and Safety Code, Division 20, Chapter 6.5, Section 25143.2 and 25143.9

Regional

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), codified in California Health and Safety Code Sections 25404 et seq., requires the administrative consolidation of six hazardous materials and waste programs under one agency, a Certified Unified Program Agency (CUPA). The following programs are consolidated under the unified program:

- Hazardous Materials Release Response Plans, and Inventory (also referred to as Hazardous Materials Business Plans)
- California Accidental Release Program
- Underground Storage Tanks
- Aboveground Petroleum Storage Spill Prevention Control and Countermeasures
- Hazardous Waste Generation and Onsite Treatment
- Uniform Fire Code Plans and Inventory Requirements

The State Secretary for Environmental Protection designated the Santa Clara County Hazardous Materials Compliance Division (HMCD) as the local CUPA. The CUPA is charged with the responsibility of conducting compliance inspections of over hazardous materials facilities in Santa Clara County. These facilities and businesses handle hazardous materials, generate or treat a hazardous waste, and/or operate underground storage tanks. The CUPA uses education and enforcement to minimize the risk of chemical exposure to human health and the environment. The CUPA forwards important facility information to local fire prevention agencies that enables them to take appropriate protective action in the event of an emergency at regulated facilities. In order to legally store and use hazardous materials above the trigger quantities, users must apply for permits and demonstrate satisfactory compliance with regulations. The quantities that trigger disclosure are based on the maximum quantity on site at any time:

- 55 gallons, 500 pounds, or 200 cubic feet for 30 days or more at any time over one year
- Any amount of hazardous waste
- Category I or II pesticides

- Explosives
- Extremely hazardous substances above the threshold planning quantity

National Pollutant Discharge Elimination System Waste Discharge Regulations

Discharges of stormwater runoff from municipal separate storm sewer systems (MS4s) are regulated by the Municipal Regional Stormwater NPDES permit, under Order No. R2-2022-0018; NPDES Permit No. CAS612008, issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB, 2022). An MS4 is a conveyance or system of conveyances that:

- Is owned by a state, city, town, village, or other public entity that discharges to waters of the United States;
- Is designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches);
- Is not a combined sewer; and
- Is not part of a sewage treatment plant or publicly owned treatment works.

Under CWA Section 402(p), stormwater permits are required for discharges from MS4s that serve populations of 100,000 or more. The Municipal Regional Permit (MRP) manages the Phase I Permit Program (serving municipalities of more than 100,000 people), the Phase II Permit Program (for municipalities of fewer than 100,000 people), and the Statewide Storm Water Permit for the California Department of Transportation.

The State Water Board and the individual water boards implement and enforce the MRP. Multiple municipalities, including the City of Mountain View, along with Santa Clara County (County), are co-permittees. These entities formed the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) to collectively address waste discharge requirements (WDRs) and manage stormwater runoff from storm drains and watercourses within their jurisdictions. The mission of the SCVURPPP is “to assist in the protection of beneficial uses of receiving waters by preventing pollutants generated from activities in urban service areas from entering runoff to the maximum extent practicable.” Member agencies implement pollution prevention, source control, monitoring, and outreach to reduce stormwater pollution in waterways and protect the water quality and beneficial uses of San Francisco Bay and Santa Clara County creeks and rivers (SCVURPPP 2022). The SCVURPPP produced the Santa Clara Basin Stormwater Resource Plan, which notes the presence of legacy pollutants of concern in the basin, specifically mercury and polychlorinated biphenyls (PCBs) that pose a risk to water resources through urban runoff (SCVURPPP 2019).

Municipal Regional Permit Provision C.3

Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development–based stormwater treatment controls to treat post-construction stormwater runoff. Low Impact Development–based treatment controls are intended to maintain or restore the site’s natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and for using stormwater as a resource (e.g., rainwater

harvesting for non-potable uses). The MRP also requires that stormwater treatment measures be properly installed, operated, and maintained.

In addition, the MRP requires new development and redevelopment projects that create or replace 1 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, generate silt pollutants, or cause other impacts on local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimum size threshold, drain into tidally influenced areas or directly into San Francisco Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are at least 65 percent impervious.

County of Santa Clara Operational Area Emergency Operations Plan

The County maintains an Emergency Operation Plan (EOP) that provides a framework for performing emergency functions before, during, and after an emergency event, natural disaster, or technological incident, and it supports the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS) (County of Santa Clara Office of Emergency Services 2017). The County works together with State, Federal, and local agencies to prevent, prepare for, respond to, and recover from incidents regardless of cause, size, or complexity effectively and efficiently. The EOP supports the overall mission of County of Santa Clara Office of Emergency Services (OES).

MEW Vapor Intrusion Study Area Requirements

At properties within the MEW Study Area, the USEPA's *Record of Decision (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 vapor intrusion remedy for future new buildings constructed within the MEW Superfund Vapor Intrusion Study Area, cited as follows:

“The selected remedy for all future buildings is Passive Sub-slab Ventilation with Vapor Barrier (and Ability to Convert to Active), Monitoring, and ICs [institutional controls]. Although Active Subslab/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 the Site indoor air cleanup levels, and therefore the passive option is more cost-effective in meeting the indoor air cleanup levels. Because areas overlying higher TCE 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.

For future building construction in the MEW Area, ICs will be implemented through the City of Mountain View's planning and permitting procedures which will ensure that the appropriate remedy is applied to particular building construction. Where the property already has a recorded agreement in place with regard to future construction, these governmental controls will be layered with

the proprietary controls. Similarly in the Moffett Field Area, ICs will be implemented through NASA’s land use planning documents and it’s Environmental Issues Management Plan. Specifically, the land use planning documents should require the operation and maintenance of remedial measures and incorporation of the remedy into new construction.”

The indoor air regulatory action levels are as listed below in **Table 4.8-3**:

**TABLE 4.8-3
 INDOOR AIR CLEANUP LEVELS FOR LONG-TERM EXPOSURE FOR THE
 MEW SITE - RESIDENTIAL BUILDINGS**

MEW Site Chemical of Concern	Indoor Air Cleanup Level (microgram per cubic meter [µg/m³])
Trichloroethene (TCE)	1
Tetrachloroethene (PCE)	0.4
cis-1,2-dichloroethene (1,2-DCE)	60
trans-1,2-DCE	60
Vinyl Chloride	0.2
1,1-dichloroethane (1,1-DCA)	2
1,1-dichloroethene (1,1-DCE)	210

SOURCE: US EPA 2011

Local

City of Mountain View Emergency Operations Center

The City of Mountain View Emergency Operations Center (EOC) is the central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management functions at a strategic level in an emergency situation and ensuring the continuity of operation of the city. During a disaster the EOC is responsible for the strategic overview, or "big picture", of the disaster, and does not normally directly control field assets, instead it functions as making operational decisions and leaving tactical decisions to lower commands. The common functions of the EOC is to collect, gather and analyze data; make decisions that protect life and property, maintain continuity of the organization, within the scope of applicable laws; and disseminate those decisions to all concerned departments, residents, and agencies.

Mountain View Fire Department

Under an agreement with the County, the MVFD implements several hazardous materials programs for the City as a Participating Agency within the Unified Program. The MVFD also enforces storage, handling, and dispensing requirements for hazardous materials and other regulated materials, according to the City Hazardous Materials Permit Code Ordinance and Toxic Gases Ordinance.

Hazardous Materials Business Plan Program

The MVFD requires any facility storing aggregate quantities of any hazardous materials equal to or greater than 10 gallons of liquids, 50 pounds of solids, or 200 cubic feet of gases to report their chemical inventories to the MVFD by preparing a HMBP. An HMBP must include measures for safe storage, transportation, use, and handling of hazardous materials. The HMBP must also include a contingency plan that describes the facility's response procedures in the event of a hazardous materials release. The HMBP informs the community on chemical use, storage, handling, and disposal practices. It is also intended to provide essential information to firefighters, health officials, planners, elected officials, workers, and their representatives so that they can plan for and respond to potential exposures to hazardous materials.

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Public Safety, and Infrastructure and Conservation Elements of the General Plan includes the following policies related to hazards and hazardous materials (City of Mountain View, 2021).

Goal PSA-3: A community protected from fire, hazardous materials and environmental contamination.

Policy PSA 3.1: Minimized losses. Minimize property damage, injuries and loss of life from fire.

Policy 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.

Policy PSA 3.3 Development review. Carry out development review procedures that encourage effective identification and remediation of contamination and protection of public and environmental health and safety.

Policy 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.

Goal INC-18: Prevention and remediation of contamination in groundwater, surface water, soil and from soil vapor and vapor intrusion.

Policy INC 18.1 Contamination prevention. Protect human and environmental health from environmental contamination.

Policy INC 18.2 Contamination clean-up. Cooperate with local, state and federal agencies that oversee environmental contamination and clean-up.

Policy LUD 2.5 Moffett Federal Airfield. Encourage compatible land uses within the Airport Influence Area for Moffett Federal Airfield as part of Santa Clara County's Comprehensive Land Use Plan.

Policy 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.

City of Mountain View Municipal Code

For construction work that will affect traffic on public streets, City of Mountain View will require the Project Applicant to apply for an Encroachment Permit (Section 27.17) or an Excavation Permit (27.31), depending on the nature of the activity. Included within these permits is the requirement to prepare and implement a Traffic Control Plan for all work that impacts traffic on an existing street. For proposed utility lines crossing a signalized intersection, the work must be completed in phases. Traffic control plans shall show the existing lane striping, traffic flow pattern with directional arrows, medians, delineators (cones), signs, and other warning devices for each phase of the work.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (as of October 25, 2021). For all construction activities, the City has standard conditions relating to hazards and hazardous materials, as summarized below.

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.

Hazardous Materials Contamination

To reduce the potential for construction workers and adjacent uses to encounter hazardous materials contamination from asbestos-containing materials (ACM) and lead-based paint, the following measures are to be included in the project:

- a. In conformance with local, State, and Federal laws, an asbestos building survey and a lead-based paint survey shall be completed by a qualified professional to determine the presence of ACMs and/or lead-based paint on the structures proposed for demolition. The surveys shall be completed prior to demolition work beginning on the structures.
- b. A registered asbestos abatement contractor shall be retained to remove and dispose of all potentially friable ACMs, in accordance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines, prior to building demolition that may disturb the materials. All construction activities shall be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than 1% asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.

- c. During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, CCR 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the waste being disposed.

Discovery of Contaminated Soils

If contaminated soils are discovered, the applicant will ensure the contractor employs engineering controls and Best Management Practices (BMPs) to minimize human exposure to potential contaminants. Engineering controls and construction BMPs will include, but not be limited to, the following: (a) contractor employees working on-site will be certified in OSHA's 40 hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training; (b) the contractor will stockpile soil during redevelopment activities to allow for proper characterization and evaluation of disposal options; (c) the contractor will monitor area around construction site for fugitive vapor emissions with appropriate field screening instrumentation; (d) the contractor will water/mist soil as it is being excavated and loaded onto transportation trucks; (e) the contractor will place any stockpiled soil in areas shielded from prevailing winds; and (f) the contractor will cover the bottom of excavated areas with sheeting when work is not being performed.

Building Demolition PCB Control

Non-wood 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.

Hazardous Materials

If hazardous materials will be stored or used on-site (including paints, thinners, compressed gases, propane, diesel, gasoline, etc.), complete an Environmental Compliance Plan (ECP) application. Attach a copy of the completed ECP to your building plan submittal.

Construction Management Plan

Upon submittal of the initial building permit and all subsequent building permit submittals, the applicant shall provide a construction traffic and parking management plan with the building

plans. The plan must be approved prior to the issuance of a building permit, including demolition. The plan must show the following:

1. *Truck Route*: Truck route (to and from project site) for construction and delivery trucks pursuant to City Code Sections 19.58 and 19.59 and which does not include neighborhood residential streets;
2. *Construction Phasing, Equipment, Storage, and Parking*: Show and identify construction vehicle and equipment parking area, material storage and lay-down area, sanitation facilities, and construction trailer location for each phase of construction. All construction vehicles, equipment, and trailer shall be located on-site or at a site nearby (not on a public street or public parking) arranged by the permittee/contractor. Construction equipment, materials, or vehicles shall not be stored or parked on public streets or public parking lots, unless approved by the Public Works Director due to special conditions. Construction contractors/workers are required to park on-site or at a private property arranged by the permittee/contractor and shall not be allowed to use neighboring streets for parking/storage; and
3. *Sidewalks*: Sidewalk closure or narrowing is not allowed during any on-site construction activities.
4. *Traffic Control and Detour Plans*: Traffic control plans, including detour plans, shall be submitted to the Public Works Department for review and approval and included with building permit plans to the Building Inspection Division for any on-site improvements and/or work related to any phase of the construction management plan that requires temporary roadway closure, lane closure, shoulder closure, and/or bike lane closure. Pedestrian detour plans shall be provided when necessary. Traffic control plans shall be prepared in accordance with the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD). A completed Traffic Control Checklist shall be included with each traffic control plan submittal. A separate Excavation Permit from the Public Works Department may be required prior to issuance of the building permit.

4.8.4 Significance Criteria

The thresholds used to determine the significance of impacts related to hazards and hazardous materials are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Approach to Analysis

This environmental analysis of the potential impacts related to hazards and hazardous materials is based on a review of literature and database research, and the Mountain View planning documents referenced above.

Development in the City, including development allowed by the HEU is regulated by the various laws, regulations, and policies summarized above in Section 4.8.3, *Regulatory Setting*. Compliance with applicable federal, state, and local laws and regulations is assumed in this analysis and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

A significant impact would occur if, after considering the features described in the Project Description and the required compliance with regulatory requirements, future development allowed by the HEU would create a significant hazard or meet other criteria listed above. For those impacts considered to be significant, mitigation measures are proposed to reduce the identified impacts.

Topics Considered and No Impact Determined

The Project would have no impact to the following topic based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reason:

- ***Location within wildland fire area.*** As discussed in Section 4.8.2, *Environmental Setting, Wildland Fires*, none the proposed HEU housing site areas are located within an area designated by Calfire as a High Fire Hazard Severity Zone. Therefore, this significance criterion is not applicable to the Project and is not discussed further.

4.8.5 Impacts of the Project

Impact HAZ-1: Implementation of the HEU would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. (*Less than Significant*)

Demolition

During the demolition of existing structures, if any, to enable the construction of new housing, the existing structures may contain hazardous building materials such as ACM, LBP, and other hazardous materials. Demolition activities may encounter hazardous building materials with

concentrations of hazardous materials above regulatory action levels, which could adversely affect construction workers, the public, and the environment.

The Project may involve the demolition and removal of existing structures, if any. As previously discussed, some structures may predate the 1970s bans on the use of ACM, LBP, and polychlorinated biphenyls (PCBs) in building materials, and hazardous building materials are anticipated to be present in the structures. As discussed in Section 4.8.3, *Regulatory Setting, Summary of Federal and State Hazardous Building Materials Regulations*, and Mountain View Standard Condition of Approval (Hazardous Materials Contamination) and (Building Demolition PCB Control), numerous existing regulations require that demolition and removal activities that may disturb or require the removal of hazardous building materials must be inspected and tested for the presence of hazardous materials. If present, the hazardous building materials must be managed and disposed of in accordance with applicable laws and regulations. The removal of ACM and LBP would require the oversight and approval of the Bay Area Air Quality Management District.

The required compliance with the numerous laws and regulations discussed above that govern the testing, handling, removal, and disposal of hazardous building materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials, and would render this impact **less than significant**.

Construction

During the construction of new housing allowed under the Project, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. Mountain View Standard Condition of Approval (Hazardous Materials) would require the proper storage and containment of hazardous materials. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

As discussed in Section 4.9, *Hydrology and Water Quality*, construction contractors would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities according to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements. The SWPPP would list the hazardous materials (including

petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff. Contaminated groundwater encountered during construction activities is prohibited from being discharged to the sanitary sewer system without permitting and approval of the City Fire & Environmental Protection Division. Discharge of treated, contaminated groundwater to the storm system must be permitted by the RWQCB.

In addition, the transportation of hazardous materials would be regulated by the USDOT, Caltrans, and the CHP. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

Finally, in the event of a spill that releases hazardous materials at a construction site, a coordinated response would occur at the federal, state, and local levels, including the County or local fire departments, which would be the local hazardous materials response team. In the event of a hazardous materials spill, the fire and law enforcement departments would be simultaneously notified and sent to the scene to respond and assess the situation.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials, and would render this impact less than significant.

Operations

Once constructed, residences developed as a result of the Project would use and store small quantities of chemicals typical in residences, such as household cleaning solutions, paints and thinners, and motor fuel (e.g., for vehicles and lawn mowers). Few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small (i.e., less than 5 gallons). Given that the quantities would be small, the routine use or an accidental spill of hazardous materials would render this impact less than significant.

Mitigation: None required.

Impact HAZ-2: Implementation of the HEU 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. (*Less than Significant*)

As discussed in Section 4.8.2, *Environmental Setting, Proximity to Schools*, there are ten schools located within Mountain View. The accidental release or spill of hazardous materials transported through the vicinity near schools could expose school children and staff to hazardous materials.

Demolition and Construction

As discussed above in Impact HAZ-1, there are numerous regulations covering the transportation, use, storage, and disposal of hazardous materials during construction activities. The required compliance with these regulations would ensure that the nearby school would not be exposed to

hazardous materials. In addition, any work that would encroach on public streets would require project applicants to apply to the Mountain View Public Works Department for an encroachment and excavation permit. These permits would require the preparation and implementation of a Traffic Control Plan to manage the movement of vehicles, including those transporting hazardous materials on roads adjacent to or near schools, as required by Mountain View Standard Condition of Approval (Construction Management Plan). Mountain View Standard Condition of Approval (Hazardous Materials) would require the proper storage and containment of hazardous materials. With the implementation of the required Traffic Control Plan, the impact relative to hazardous materials, substances, or waste in proximity to schools would be **less than significant**.

Operations

As discussed in Impact HAZ-1, once constructed, residences allowed by the Project would use and store small quantities of chemicals typical in residences, such as household cleaning solutions, paints and thinners, and motor fuel (e.g., cars and lawn mowers). Few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small (i.e., less than 5 gallons). Given that few of the routinely used chemicals would be considered hazardous and that the quantities would be small, the routine use or an accidental spill of hazardous materials near a school would render this impact **less than significant**.

Mitigation: None required.

Impact HAZ-3: Implementation of the HEU would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment. (*Less than Significant with Mitigation*)

As discussed in Section 4.8.2, *Environmental Setting, Hazardous Materials Sites*, some existing and some closed hazardous materials release sites are located within or adjacent to some areas proposed for housing as part of the HEU, meaning they are listed on the Cortese List (i.e., Government Code Section 65962.5 5) due to the release of hazardous materials. Construction on active or closed hazardous materials sites could expose construction workers, the public or the environment to hazardous materials.

As described in Section 4.8.3, *Regulatory Setting, MEW Vapor Intrusion Study Area Requirements*, projects constructed with the known vapor intrusion areas shown on Figure 4.8-1 would be required to construct vapor intrusion systems to prevent VOCs above the listed regulatory action levels from entering the breathing space of residences. The systems would consist of passive sub-slab ventilation with vapor barrier system with the ability to convert to active (i.e., mechanical pumping of sub-slab vapors). The systems would require routine vapor monitoring to quantify the concentrations of VOCs. In the event that Indoor Air Cleanup Levels are exceeded, the vapor intrusion system would be required to be converted to an active pumping system. Projects that overlie the Vapor Intrusion Study Area would also require establishing institutional controls to verify that the vapor intrusion systems are maintained. With compliance

with the existing regulations for development within the MEW Vapor Intrusion Study Areas, impacts that would be **less than significant**.

However, as discussed in Section 4.8.2, *Environmental Setting, Hazardous Materials Sites, GeoTracker and EnviroStor Hazardous Materials Sites*, and as shown on Figure 4.8-1, there are other hazardous materials sites in addition to the vapor intrusion areas. These other hazardous materials sites may contain contaminated soil and/or groundwater as a result of previous land uses. During construction, there is the potential to encounter previously unknown contaminated soil, and, if dewatering is needed, groundwater. Construction workers, the public, and the environment could be exposed to hazardous materials and the impact could be **potentially significant**.

As discussed in Impact HAZ-1, there are numerous regulations covering the transportation, use, storage, and disposal of hazardous materials during construction activities. The required compliance with these regulations would reduce the exposure to hazardous materials. To further ensure that contaminated materials are properly handled, the project applicant would be required to implement **Mitigation Measures HAZ-1, Phase I Assessment**, as described below, which would reduce the impact to **less than significant**.

Mitigation Measure HAZ-1: Phase I Environmental Site Assessment.

Prior to the initiation of any construction requiring ground-disturbing activities on listed active hazardous materials cleanup sites, the project applicant shall complete a Phase I environmental site assessment for that property in accordance with American Society for Testing and Materials Standard E1527 for those active hazardous materials sites to ascertain their current status. Any recommended follow up sampling (i.e., Phase II activities) set forth in the Phase I assessment shall be implemented prior to construction. The results of Phase II studies, if necessary, shall be submitted to the local overseeing agency and any required remediation or further delineation of identified contamination shall be completed prior to commencement of construction.

Prior to final project design of any individual project that includes any earth-disturbing activities, the project applicant shall conduct a Phase I Environmental Site Assessment (Phase I assessment). The Phase I assessment shall be prepared in general accordance with ASTM Standard E1527-21, *Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process* (or most current edition that is in force at the time of final project design), which is the current industry standard. The Phase I assessment shall include a records review of appropriate federal, State, and local databases within ASTM-listed search distances regarding hazardous materials use, storage, or disposal at the given site, a review of historical topographic maps and aerial photographs, a site reconnaissance, interviews with persons knowledgeable about the sites historical uses, and review of other relevant existing information that could identify the potential existence of Recognized Environmental Conditions, including hazardous materials, or contaminated soil or groundwater. If no Recognized Environmental Conditions are identified, then no further action would be required.

If Recognized Environmental Conditions are identified and the Phase I assessment recommends further action, the project applicant shall conduct the appropriate follow-up actions, which may include further records review, sampling of potentially hazardous

materials, and possibly site cleanup. In the event that site cleanup is required, the project shall not proceed until the site has been cleaned up to the satisfaction of the appropriate regulatory agency (e.g., DTSC, RWQCB, or SCCEHD) such that the regulatory agency issues a No Further Action letter or equivalent.

Significance after Mitigation: Mitigation Measure HAZ-1 would ensure that site assessment and, if needed, site cleanup, would occur prior to any earth-disturbing activities within a given project site. This would reduce the potential for an unanticipated discovery during project construction, and reduce the potential effects on construction workers, the public, and the environment. With the implementation of this mitigation measure, this impact would be reduced **to less than significant**.

Impact HAZ-4: Implementation of the HEU would not result in a safety hazard or excessive noise for people residing or working in the project area related to a public airport or public use airport. (*Less than Significant*)

Impacts relative to noise are analyzed in Section 4.11, *Noise*.

As described in Section 4.8.2, *Environmental Setting, Proximity to Airports*, some of the sites identified for housing as part of the HEU would be located within the Moffett Federal Airfield FAR Part 77 Surface that restricts the height of structures within the AIA. Structures that exceed the height restrictions could adversely affect navigable airspace and potentially cause aircraft accidents.

As described in Section 4.8.3, *Regulatory Setting, Federal, Airports*, restrictions on the height of buildings, antennas, trees, and other objects near Moffett Federal Airfield are regulated by the FAA, specifically, FAR Part 77. The FAR Part 77 map is used by the FAA and the Santa Clara County ALUC to identify potential obstructions and hazards to aviation traffic. The project applicant would be required to comply with the height restrictions. In the event that a project would extend into the FAR 77 surface, the project applicant would be required to apply for a variance with the FAA and the Santa Clara County ALUC. With compliance with these existing regulations on building heights, the impact relative to airports would be **less than significant**.

Mitigation: None required.

Impact HAZ-5: Implementation of the HEU would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (*Less than Significant*)

Demolition and Construction

During construction of residences planned for in the HEU, construction workers would access the proposed housing sites, and equipment and materials would be delivered for construction. While most construction activities would occur within the proposed housing sites and off public roads, the construction activities may require some temporary road closures or restrictions for the delivery of materials and/or utility improvements that extend into streets. The road closures or restrictions could interfere with emergency response or evacuation.

As discussed above in Impact HAZ-2, any work that would encroach on public streets would require project applicants to apply to the Mountain View Public Works Department for an encroachment and/excavation permit. These permits would require the preparation and implementation of a Traffic Control Plan to manage the movement of vehicles as required by Mountain View Standard Condition of Approval (Construction Management Plan). The Traffic Control Plan would manage demolition and construction traffic such that emergency vehicles that need to travel by the sites would not be affected. With the implementation of the required Traffic Control Plan, the impact relative to adopted emergency response plan or emergency evacuation plan would be **less than significant**.

Operations

Generally, the proposed HEU housing sites would not alter the overall land use patterns or land use designations to such an extent that would conflict with County or City emergency response and/or evacuation plans. In addition, the County and City have established response plans for significant hazards (e.g., floods, earthquakes, wildland fires, terrorism, and technological hazards) that include goals, programs, objectives, and action items to ensure effective emergency response to significant hazards. The number of additional residents is not anticipated to add a significant amount of vehicle trips and is not anticipated to result in significant impacts to for emergency response. The impact relative to emergency access would be **less than significant**.

Mitigation: None required.

4.8.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to hazards and hazardous materials could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects identified in Section 4.0.3, *Cumulative Impacts*, would be significant and if the HEU's contribution is considerable.

The geographic area affected by the proposed housing sites and their potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative hazardous materials impacts encompasses and is limited to the proposed housing sites and their immediately adjacent area. This is because impacts relative to hazardous materials are generally site-specific and depend on the nature and extent of the hazardous materials release, and existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller and more localized area surrounding the immediate spill location and extent of the release, and could only be cumulative if two or more hazardous materials releases spatially overlapped.

The timeframe during which the project could contribute to cumulative hazards and hazardous materials effects includes the construction and operations phases. For the proposed housing sites, the operations phase is permanent. However, similar to the geographic limitations discussed

above, it should be noted that impacts relative to hazardous materials are generally time-specific. Hazardous materials events could only be cumulative if two or more hazardous materials releases occurred at the same time, as well as overlapping at the same location.

Impact HAZ-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts relative to hazards and hazardous materials. (*Less than Significant*)

Cumulative Impacts during Construction

Significant cumulative impacts related to hazards and hazardous materials could occur if the incremental impacts of the proposed housing sites combined with the incremental impacts of cumulative development discussed above would substantially increase risk that people or the environment would be exposed to hazardous materials.

The construction activities for all cumulative development would be subject to the same regulatory requirements discussed for the proposed HEU housing sites for compliance with existing hazardous materials regulations, including spill response. Construction projects that have spills of hazardous materials would be required to remediate their respective sites to the same established regulatory standards as the proposed housing sites. This would be the case regardless of the number, frequency, or size of the release(s). The responsible party associated with each spill would be required to remediate site conditions to the same established regulatory standards. The residual less-than-significant effects of the proposed housing sites that would remain after mitigation would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific and would be below regulatory standards. Accordingly, no significant cumulative impact with respect to the use of hazardous materials would result. For the above reasons, the Project would not cause or contribute to a cumulatively considerable impact with respect to the use of hazardous materials, and impacts would be **less than significant**.

Construction for two or more projects that occur at the same time and use the same roads could cause interference with emergency access. Similar to the HEU projects, for construction work that will affect traffic on public streets, the City of Mountain View will require project applicants to apply for an Encroachment and/or Excavation Permit that would include the requirement to prepare and implement a Traffic Control Plan for all work that would encroach within the public right-of-way. The encroachment permit would include traffic control measures to manage the movement of vehicles, including ensuring that emergency vehicles (e.g., police, fire, ambulances, and other vehicles traveling under emergency conditions) are able to pass through or by construction sites. Applicants are required to coordinate construction activities if traffic control/construction overlaps between two or more projects. With the implementation of the encroachment permit and its traffic control measures, the impact relative to emergency response or emergency evacuation would not cause or contribute to a cumulatively considerable impact, and impacts would be **less than significant**.

Mitigation: None required.

Cumulative Impacts during Project Operations

Significant cumulative impacts related to operational hazards could occur if the incremental impacts of the proposed housing sites combined with those of one or more of the above-listed projects to cause a substantial increase in risk that people or the environment would be exposed to hazardous materials used or encountered during the operations phase.

Once constructed, the residences would use and store small quantities of chemicals typical in residences, such as household cleaning solutions, paints and thinners, and motor fuel (e.g., cars and lawn mowers). Few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small (i.e., less than 5 gallons). Given that the quantities would be small, the proposed HEU housing sites would not cause or contribute to a cumulatively significant impact with respect to the use of hazardous materials, and impacts would be **less than significant**.

For the cumulative projects that include the use of reportable quantities of hazardous materials, the cumulative project components involving the handling, storage, and disposal of hazardous materials would be required to prepare and implement an HMBP and comply with applicable regulations, including those governing containment, site layout, and emergency response and notification procedures in the event of a spill or release. Transportation and disposal of wastes, such as spent cleaning solutions, would also be subject to regulations for the safe handling, transportation, and disposal of chemicals and wastes. As noted previously, such regulations include standards to which parties responsible for hazardous materials releases must return spill sites, regardless of location, frequency, or size of release, or existing background contaminant concentrations to their original conditions. Therefore, compliance with existing regulations regarding hazardous materials transport would reduce the risk of environmental or human exposure to such materials. The combined effects of the proposed housing sites and cumulative projects would not be cumulatively considerable result in a significant cumulative impact, and impacts would be **less than significant**.

Similar to the HEU project, cumulative projects that are located within the Moffett Federal Airfield FAR Part 77 surface area would also be required to comply with the height restrictions identified in the CLUP. In the event that a cumulative project would extend into the FAR 77 surface, the project applicant would be required to apply for a variance with the FAA and the Santa Clara County ALUC. With compliance with these existing regulations on building heights, the combined effects of the proposed HEU housing sites and cumulative projects would not be cumulatively considerable result in a significant cumulative impact, and impacts would be **less than significant**.

Generally, the proposed HEU housing sites would not alter the overall land use patterns or land use designations to such an extent that would conflict with County or City emergency response and/or evacuation plans. It is assumed that cumulative projects would also be designed to not conflict with County or City emergency response and/or evacuation plans. In addition, the County and City have established response plans for significant hazards (e.g., floods, earthquakes, wildland fires, terrorism, and technological hazards) that include goals, programs, objectives, and action items to ensure effective emergency response to significant hazards. The number of additional residents is not anticipated to add a significant amount of vehicle trips and is

not anticipated to result in significant impacts to for emergency response. The combined effects of the proposed housing sites and cumulative projects would not be cumulatively considerable result in a significant cumulative impact, and impacts would be **less than significant**.

4.8.7 Summary of Hazards and Hazardous Materials Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact HAZ-1: Implementation of the HEU would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.	Less than Significant	None required	-
Impact HAZ-2: Implementation of the HEU 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.	Less than Significant	None required	-
Impact HAZ-3: Implementation of the HEU would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	Potentially Significant	Mitigation Measure HAZ-1: Phase I Environmental Site Assessment	Less than Significant
Impact HAZ-4: Implementation of the HEU would not result in a safety hazard or excessive noise for people residing or working in the project area related to a public airport or public use airport.	Less than Significant	None required	-
Impact HAZ-5: Implementation of the HEU would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	None required	-
Impact HAZ-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts relative to hazards and hazardous materials.	Less than Significant	None required	-

4.8.8 References

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County of Santa Clara, 2017. *County of Santa Clara Emergency Operations Plan*. January.

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Windus, Walter B., 2016b. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*. Amended November 18.

4.9 Hydrology and Water Quality

4.9.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on hydrology and water quality. This section first includes a description of the existing environmental setting as it relates to surface and groundwater, flooding, water quality, and other hydrological considerations, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on hydrology and water quality.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to hydrology and water quality were received during the NOP comment period.

4.9.2 Environmental Setting

Study Area

The City of Mountain View is located in northern Santa Clara County and is bordered by the San Francisco Bay to the North, the City of Palo Alto to the West, the City of Los Altos to the South and Southwest, and Moffett Federal Airfield and the City of Sunnyvale to the East (see Figure 3-1 in Chapter 3 of this EIR, *Project Description*). The City of Mountain View is situated at an elevation of roughly 105 feet above mean sea level.

Surface Waters

Surface waters in the study area include ephemeral waterways such as Stevens Creek and Permanente Creek as well as the tributary Hale Creek that flows into it. Adobe Creek also runs through a small portion of the East side of Mountain View.

Surface Water Quality

Stevens Creek is listed on the Clean Water Act (CWA) 303(d) list¹ condition category 5² as impaired for diazinon (pesticides), temperature, toxicity (total toxics), and trash with a TMDL being implemented for toxicity. None of the sources are known for the Stevens Creek Pollutants. Permanente Creek is also listed on the CWA 303(d) list condition category 5 as impaired for diazinon (pesticides), selenium (metals), toxicity (total toxics), and trash with a TMDL being implemented for selenium. Pathways for pollutants to enter the creek are myriad. Trash may enter the creeks and streams from being wind-blown, illegally dumped, or potentially from the storm drainage system. Diazinon comes from urban runoff/storm sewers, and available data suggests that discharges from Lehigh Permanente Quarry located in the upper watershed contributes most

¹ The term 303(d) list is short for the state's list of impaired and threatened waters (e.g., stream/river segments, lakes). The state identifies the pollutant causing the impairment, when known.

² Category 5 condition refers to a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for the segment.

of the selenium in Permanente Creek (RWCB, 2022a). Adobe Creek is not listed as an impaired area on the CWA 303(d) list (SWRCB, 2018).

Groundwater Resources

The California Department of Water resources (DWR) defines state groundwater basins based on geologic and hydrogeologic conditions. The DWR considers the Santa Clara Subbasin (DWR Groundwater Basin No. 2-009.02) an important and beneficial groundwater basin underlying the Santa Clara Valley. The Santa Clara subbasin occupies a structural trough parallel to the northwest trending Coast Ranges. The Diablo Range bounds it on the west and the Santa Cruz Mountains form the basin boundary on the east. It extends from the northern border of Santa Clara County to the groundwater divide near the town of Morgan Hill (DWR, 2004). The Santa Clara Basin is divided into two subbasins: the Santa Clara and Llagas subbasins, which cover a combined surface area of approximately 385 square miles. Due to different land use and management characteristics, the Santa Clara Subbasin is further divided into two management areas: the Santa Clara Plain and the Coyote Valley. The dominant geohydrologic feature is the Santa Clara Valley, which drains northward to the San Francisco Bay by tributaries such as Coyote Creek, the Guadalupe River, and Los Gatos Creek. The two drainages running through Mountain View's City boundaries include Stevens Creek and Permanente Creek, which flow from the Santa Cruz Mountains to the Bay (City of Mountain View, 2021a).

Water Supply

Potable water supply for the City of Mountain View is provided from three sources – the San Francisco Public Utilities Commission (SFPUC), Santa Clara Valley Water District (SCVWD), and local groundwater wells. The City obtains approximately 87 percent of its drinking water from the SFPUC Regional Water System, most of which originate from the Sierra Nevada snowmelt that flows into the Tuolumne River and is stored in the Hetch Hetchy reservoir in Yosemite National Park. A smaller portion of the water SFPUC water supply includes rainwater runoff collected in watersheds in Alameda, San Mateo, and Santa Clara counties (City of Mountain View, 2021b).

The SCVWD, now known as Valley Water, supplies approximately 11 percent of the City's potable water supply. Surface water is imported mainly from the South Bay Aqueduct, Dryer Reservoir, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento – San Joaquin River Delta watershed. The remaining supply comes from local rainfall which is captured in the Valley Water's ten local reservoirs. Local water sources include Anderson and Calero reservoirs, however Anderson Reservoir is currently offline for dam rehabilitation (City of Mountain View, 2021b). Valley Water releases this water into local creeks and percolation ponds to replenish local groundwater aquifers and to manage environmental needs (City of Mountain View, 2022).

The City owns and operates groundwater wells that provide two percent of the potable water supply. Groundwater beneath Mountain View is present in two aquifers within the Santa Clara groundwater subbasin separated by natural clay formations. City wells are drilled deep into the lower aquifer where the clay formations and geology help protect the City's groundwater supply from contamination. Groundwater is blended with SFPUC water for distribution to City water

customers. The City's wells also serve as a backup water supply during emergencies (City of Mountain View, 2021b).

In 2020, The City's overall water supply production was 84 percent SFPUC, 10 percent Valley Water, 2 percent groundwater, and 4 percent recycled water (City of Mountain View, 2021a).

Mountain View uses recycled water from the Palo Alto Regional Water Quality Control Plant for irrigation and toilet flushing in the North Bayshore Area. There are currently 58 active customer connections to the City's recycled water system, including Shoreline golf course regional park, Shoreline Amphitheatre, Charleston Park, and various business and roadway landscaping (City of Mountain View, 2021a).

The City of Mountain View's Water Shortage Contingency Plan was developed to serve as a flexible framework of planned response measures to mitigate water supply shortages. The City's Water Shortage Plan was prepared in accordance with the following guiding principles: shared contribution, meet basic health and safety needs, prioritize reducing nonessential water uses, minimize economic impacts to businesses, and communication at every stage. The current Water Shortage Plan identifies four stages of action in response to a water supply shortage (stages 1 through 4) (City of Mountain View, 2021a).

Flooding and Drainage

Flooding is inundation of normally dry land as a result of a rise in surface water levels or rapid accumulation of stormwater runoff during storm events. The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping (FIRM) program, designates areas where urban flooding could occur during 100-year and 500-year flood events. A 100-year flood event has a one-percent probability of occurring in a single year. 100-year floods can occur in consecutive years or periodically throughout a decade. A 500-year flood event has a 0.2 percent probability of occurring in a single year. The City of Mountain View has areas that lie within the 100-year floodplain, mainly concentrated in the North Bayshore area. There are also some areas in the southern portion of the City located in 100-year floodplain areas (MTC and ABAG, 2020).

Tsunami and Seiche Hazards

Tsunamis are a series of waves generated by vertical movement of the sea floor, normally associated with earthquakes or volcanic eruptions. There is a small portion of Mountain View located in a tsunami evacuation zone (MTC and ABAG, 2020). This area is in the very northern portion of the North Bayshore Area of the City, and none of the proposed housing sites identified as part of the HEU are located within a tsunami evacuation zones. The housing sites located outside of the North Bayshore area are located inland from coastal areas and would not be subject to tsunamis.

Seiches are oscillations of enclosed or semi-enclosed bodies of water that result from seismic events, wind stress, volcanic eruptions, underwater landslides, and local basin reflections of tsunamis. The key requirement for the formation of a seiche is that a body of water be at least partially bounded, allowing for a standing wave to form. There is no body of water in the City of

sufficient size to produce a seiche. None of the housing sites are close to enclosed or semi-enclosed bodies of water.

4.9.3 Regulatory Setting

Federal

Clean Water Act

The federal Clean Water Act (CWA) and subsequent amendments, under the enforcement authority of the U.S. Environmental Protection Agency (USEPA), was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The purpose of the CWA is to protect and maintain the quality and integrity of the nation’s waters by requiring states to develop and implement state water plans and policies. The CWA gave the USEPA the authority to implement pollution control programs such as setting wastewater standards for industry. In California, implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) program is conducted through the California State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The CWA also sets water quality standards for surface waters and established the NPDES program to protect water quality through various sections of the CWA, including Sections 401 through 404 and 303(d) that are implemented and regulated by the SWRCB and the nine RWQCBs. Section 402 of the CWA would apply to the Project because the Project would be required to control discharges of pollutants from point sources, as discussed below.

Section 402

The 1972 amendments to the Federal Water Pollution Control Act established the NPDES permit program to control discharges of pollutants from point sources (Section 402). The 1987 amendments to the CWA created a new section of the CWA devoted to stormwater permitting (Section 402[p]). The USEPA has granted the SWRCB primacy in administering and enforcing the provisions of CWA and NPDES through the local RWQCBs. NPDES is the primary federal program that regulates point-source and non-point-source discharges to waters of the United States.

The SWRCB issues both general and individual permits for discharges to surface waters, including for both point-source and non-point-source discharges. In response to the 1987 amendments, the US EPA developed the Phase I NPDES Storm Water Program for cities with populations larger than 100,000, and Phase II for smaller cities. In California, the SWRCB has drafted the General Permit for Discharges of Storm Water from Municipal Separate Storm Sewer Systems (MS4 General Permit). Development permitted by the HEU would be subject to the Phase II MS4 permit, discussed further below.

National Pollutant Discharge Elimination System (NPDES) Permit

The NPDES permit system was established in the CWA to regulate municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. Section 402 of the CWA contain general requirements regarding NPDES permits.

The CWA was amended in 1987 to require NPDES permits for non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the “maximum extent practicable” through the use of structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (filter strips, grass swales and detention ponds). The NPDES permits that apply to activities in the City are described under State and local regulations.

Federal Emergency Management Agency

Under Executive Order 11988, the Federal Emergency Management Agency (FEMA) is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA is a federal agency whose overall mission is to support citizens and first responders to ensure that the United States builds, sustains, and improves capabilities to prepare for, protect against, respond to, recover from, and mitigate all hazards. With regard to flooding, the FEMA provides information, guidance, and regulation associated with flood prevention, mitigation, and response. Under Executive Order 11988, FEMA requires that local governments covered by the federal flood insurance program pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. Through its Flood Insurance and Mitigation Administration, FEMA manages the National Flood Insurance Program, which includes flood insurance, floodplain management, and flood hazard mapping functions. FEMA determines flood elevations and floodplain boundaries and distributes the flood insurance rate maps used in the National Flood Insurance Program. These maps identify the locations of special flood hazard areas, including 100-year floodplains (i.e., areas that would have a 1 percent annual chance of flooding).

Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations. Those regulations enable FEMA to require municipalities participating in the National Flood Insurance Program to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the Water Code Sections 13000, et sec.) is the primary water quality control law in California. Porter-Cologne established the State Water Resources Control Board and divided the state into nine regional basins, each overseen by a RWQCB. The nine RWQCBs have the primary responsibility for the coordination and control of water quality within their respective jurisdictional boundaries. The Porter-Cologne Act requires the RWQCBs to establish water quality objectives while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses. Water quality objectives are limits or levels of water quality constituents or characteristics established

for the purpose of protecting beneficial uses. Designated beneficial uses, together with the corresponding water quality objectives, also constitute water quality standards under the federal CWA. Therefore, the water quality objectives form the regulatory references for meeting state and federal requirements for water quality control. Designated beneficial uses for water bodies in the study area are described in the regional regulatory section (under Basin Plan discussion).

NPDES General Permit for Discharges of Stormwater Associated with Construction Activities (Order 2009-0009-DWQ)

Construction of multifamily housing allowed by the HEU would disturb more than one acre of land surface affecting the quality of stormwater discharges into waters of the U.S. These developments would, therefore, be subject to the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the U.S. from construction sites that disturb one acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation; construction of buildings; and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving water bodies and is based on the nature of the construction activities and the location of the site relative to receiving water bodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge. Depending on the risk level, the construction projects could be subject to the following requirements:

- Effluent standards;
- Good site management “housekeeping;”
- Non-stormwater management;
- Erosion and sediment controls;
- Run-on and runoff controls;
- Inspection, maintenance, and repair; or
- Monitoring and reporting requirements.

The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific best management practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving off site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants

from the construction area. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

The SWPPP must be prepared before the construction begins. The SWPPP must contain a site map(s) that delineates the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The Construction General Permit also sets post-construction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the site following construction).

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014, effective January 1, 2015, authorizes local agencies to manage groundwater in a sustainable manner and allows limited state intervention when necessary to protect groundwater resources. SGMA defined “sustainable groundwater management,” established a framework for local agencies to develop plans, and implement strategies to sustainably manage groundwater resources, established basin prioritization (ranked from very low to high priority), and set a 20-year timeline for implementation. Basins are prioritized under the SGMA by the California Department of Water Resources (DWR). The HEU would apply to areas that are within the Santa Clara Subbasin and areas not located within a DWR-designated groundwater basin. The largest groundwater basin in Mountain View is the Santa Clara a subbasin, identified by DWR as a high-priority basin, though not one in condition of critical overdraft (DWR, 2022).

Valley Water updated its Groundwater Management Plan (GWMP) for the Santa Clara and Llagas subbasins in 2021, describing its comprehensive groundwater management framework including objectives and strategies, programs and activities to support those objectives, and outcome measures to gauge performance. The GWMP 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 (Valley Water, 2021).

Regional

San Francisco Bay Water Quality Control Plan (Basin Plan)

The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the master water quality control planning document used to designate beneficial uses and surface and ground water quality objectives. The Project site is located within the water quality control jurisdiction of Region 2, the San Francisco Bay Regional Water Quality Control Board (RWQCB). Region 2 is tasked with implementing the adopted Basin Plan for the San Francisco Bay Basin through planning, permitting, and enforcement of established water quality objectives. In accordance with State Policy for Water Quality Control, Region 2 employs a range of beneficial use designations for surface waters (including creeks, streams, lakes and reservoirs), groundwaters, marshes, and mudflats that serve as the basis for establishing water quality objectives, discharge conditions, and prohibitions. The Basin Plan, as updated with amendments adopted through November 5, 2019, has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdictional planning area (RWQCB, 2019). Designated beneficial uses for water bodies in the study area are provided in **Table 4.9-1**.

**TABLE 4.9-1
 DESIGNATED BENEFICIAL USES FOR WATER BODIES IN THE STUDY AREA**

Water Body	Designated Beneficial Uses
Adobe Creek	COLD, WARM, WILD, REC-1, REC-2
Permanente Creek	GWR, COLD, RARE, SPWN, WARM, WILD, REC-1, REC-2
Hale Creek	COLD, WARM, WILD, REC-1, REC-2
Stevens Creek	FRSH, GWR, COLD, MIGR, RARE, SPWN, WARM, WILD, REC-1, REC-2

Existing and Potential Beneficial Uses Key:

COLD (Cold Freshwater Habitat), FRESH (Freshwater Replenishment), GWR (Groundwater Recharge), MIGR (Fish Migration), RARE (Preservation of Rare and Endangered Species), REC-1 (Water Contact Recreation), REC-2 (Noncontact Water Recreation), SPWN (Fish Spawning), WARM (Warm Freshwater Habitat), WILD (Wildlife Habitat).

SOURCE: RWQCB, 2019

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) supports member agencies in implementing stormwater quality activities in compliance with state and Federal water quality mandates. Mountain View along with all other incorporated cities and unincorporated areas in Santa Clara County participate in the SCVURPPP as permittees. Members of this program are regulated waste dischargers under an NPDES permit program Municipal Regional Stormwater NPDES Permit (Order No. R2-2015-0049) issued by the San Francisco Bay RWQCB, responsible for municipal storm drain systems and water courses that they own and operate. Municipal Storm Sewer Systems (MS4s) carry stormwater runoff from hard surfaces such as roofs and pavement directly to creeks, wetlands and the Bay/Delta.

Under the MRP, stormwater pollution prevention includes limiting trash and other pollutants from entering the stormdrain. Some examples of MRP mandated local activities include implementing BMPs when washing or renovating paved areas, practicing good housekeeping measures to limit

pollution, requiring land development projects (public and private) to incorporate low impact development features and facilities to reduce runoff pollution over the life of a project.

Phase I - Municipal Regional Stormwater Permit (MRP)

The federal Clean Water Act (CWA) was amended in 1987 to address urban stormwater runoff pollution of the nation's waters. In 1990, US EPA promulgated rules establishing Phase 1 of the National Pollutant Discharge Elimination System (NPDES) stormwater program. The Phase 1 program for Municipal Separate Storm Sewer System (MS4s) requires operators that serve populations of 100,000 or greater to implement a stormwater management program as a means to control polluted discharges from these MS4s.

The Water Board issued county-wide municipal stormwater permits in the early 1990s to operators of MS4s serving populations over 100,000 (Phase 1). On November 19, 2015, the Water Board re-issued these county-wide municipal stormwater permits as one Municipal Regional Stormwater NPDES Permit (Order No. R2-2022-0018) to regulate stormwater discharges from municipalities and local agencies in Santa Clara County and numerous other counties in the San Francisco Bay Area (RWQCB, 2022).

Local

City of Mountain View 2020 Urban Water Management Plan

The Urban Water Management Plan (UWMP) provides an analysis of the City of Mountain View's available water supply, during normal and dry-year scenarios, compared to current and projected water demand. The UWMP is a link between land use planning and water supply planning, developed to evaluate if sufficient water is available to meet the needs of Mountain View's existing and future water customers. This UWMP update also includes an update to the Water Shortage Contingency Plan. Mountain View's municipal water system serves the majority of businesses and residents within the City limits. A small number of customers are served by the California Water Service Company. The City's service population is currently 79,772, with an employment base of 98,270 (City of Mountain View, 2021a).

City of Mountain View Water Shortage Contingency Plan

The City of Mountain View's Water Shortage Contingency Plan was updated in May 2015 in response to the drought and was implemented between 2014 and 2017 to address mandates from the State Water Board and Governor. The City's Water Shortage Contingency Plan was developed to serve as a flexible framework of planned response measures to mitigate water supply shortages (City of Mountain View, 2021a).

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Infrastructure and Conservation and Parks, Open Space, and Community Facilities Elements of the General Plan includes the following policies related to hydrology and water quality (City of Mountain View, 2021).

Goal INC-3: Functional, safe and well-maintained public rights-of-way that promote environmental sustainability.

Policy INC-3.3: Street Design for Stormwater. Encourage street designs that reduce stormwater flows and accomplish other City stormwater goals.

Policy INC-3.7: Recycled Water Separation. Ensure that expansion of recycled water infrastructure in the public right-of-way with other utilities adheres to separation criteria provided by the California Department of Public Health.

Goal INC-4: A sustainable water supply with sufficient supply and appropriate demand management.

Policy INC-4.1: Water Supply. Maintain a reliable water supply.

Policy INC-4.2: Participating in Regional Organizations. Participate in regional water supply organizations, support their efforts to maintain and improve the water supply and monitor statewide and regional water supplies.

Policy INC-4.4: Expanding Water Service Area. Provide water service to areas outside the City service area if it is mutually beneficial for the City and prospective new users.

Goal INC-5: Effective and comprehensive programs utilizing water use efficiency, water conservation and alternative water supplies to reduce per capita potable water use.

Policy INC-5.1: Community Awareness. Raise community awareness about water use efficiency and water conservation.

Policy INC-5.2: Citywide Water Conservation. Reduce water waste and implement water conservation and efficiency measures throughout the city.

Policy INC-5.3: Water Reuse. Remove barriers and provide guidance for the use of rainwater and graywater as alternative water supplies.

Policy INC-5.4: Smart Water Meters. Encourage water meter technologies that provide water usage feedback to customers.

Policy INC-5.5: Landscape Efficiency. Promote water-efficient landscaping including drought-tolerant and native plants, along with efficient irrigation techniques.

Policy INC-5.6: Indoor Efficiency. Promote the use of water-efficient fixtures and appliances.

Policy INC-5.7: Leadership in City Facilities. Provide leadership by promoting water use efficiency, water conservation and the use of recycled water at City-owned facilities.

Goal INC-6: A coordinated wastewater collection system that protects the community's health and safety.

Policy INC-6.1: Citywide Wastewater. Ensure high-quality wastewater collection services and a well-maintained wastewater system.

Policy INC-6.2: Pollution Source Control. Implement an effective and comprehensive industrial pretreatment program and industrial, commercial and residential pollution source control programs.

Policy INC-6.3: Wastewater Treatment Partnership. Partner with the Palo Alto Regional Water Quality Control Plant to ensure high-quality water treatment.

Policy INC-6.4: Discharge Regulations. Coordinate with partners and other local agencies to monitor changing rules and regulations regarding wastewater discharge from the Palo Alto Regional Water Quality Control Plant

Goal INC-7: A reliable, safe and extensive recycled water infrastructure system.

Policy INC-7.1: Citywide Recycled Water Use. Promote, require or offer incentives for using recycled water as an alternative to potable water

Policy INC-7.2: Recycled Water System. Expand the use and availability of recycled water throughout the city.

Policy INC-7.3: Recycled Water in Parks. Promote the use of recycled water at City parks and open spaces or where available.

Policy INC-7.4: Recycled Water and Trees. Promote appropriate tree and landscape species irrigated by recycled water.

Policy INC-7.5: Rights-of-way and Infrastructure. Design public right-of-way to accommodate recycled water infrastructure.

Goal INC-8: An effective and innovative stormwater drainage system that protects properties from flooding and minimizes adverse environmental impacts from stormwater runoff.

Policy INC-8.1: Citywide Stormwater System. Maintain the stormwater system in good condition.

Policy INC-8.2: National Pollutant Discharge Elimination System Permit. Comply with requirements in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP).

Policy INC-8.3: Cost-effective Strategies. Encourage stormwater strategies that minimize additional City administrative and maintenance costs.

Policy 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.

Policy INC-8.5: Site-specific Stormwater Treatment. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC-8.6 Green Streets. Seek opportunities to develop green streets and sustainable streetscapes that minimize stormwater runoff, using techniques such as on-street bio-swales, bio-retention, permeable pavement or other innovative approaches.

Policy INC-8.7: Stormwater Quality. Improve the water quality of stormwater and reduce flow quantities.

Policy INC-8.8: Stormwater Infrastructure Funding. Develop permanent and ad hoc sources of funding to implement stormwater best practices in the city.

Goal INC-16: Rich and biologically diverse ecological resources which are protected and enhanced.

Policy INC-16.5: Wetland Habitat. Collaborate with and support regional efforts to restore and protect wetlands, creeks, tidal marshes and open-water habitats adjacent to San Francisco Bay.

Goal INC-17: A healthy and well-managed watershed that contributes to improved water quality and natural resource protection.

Policy INC-17.1: Flood Prevention. Provide and maintain City infrastructure to reduce localized flooding and protect community health and safety.

Policy INC-17.2: Natural Hydrology in Watersheds. Promote an ecologically sensitive approach to flood protection, encouraging natural hydrology and preserving habitat and ecology within watercourses.

Policy INC-17.3: Floodway Preservation. Preserve floodways as a natural flood control mechanism.

Policy INC-17.4: National Flood Insurance Program. Participate in the National Flood Insurance Program administered by the Federal Emergency Management Administration.

Goal INC-18: Prevention and remediation of contamination in groundwater, surface water, soil and from soil vapor and vapor intrusion.

Policy INC-18.1: Contamination Prevention. Protect human and environmental health from environmental contamination.

Policy INC-18.2: Contamination Clean-Up. Cooperate with local, state and federal agencies that oversee environmental contamination and clean-up.

Goal POS-12: A healthy urban forest and sustainable landscaping throughout the city.

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

Policy POS-12.5: Salt-tolerant Vegetation. Promote the use of salt-tolerant vegetation that can use recycled water.

City of Mountain View Municipal Code

Section 35.34 – Permanent stormwater pollution prevention measures required.

The City requires stormwater pollution prevention measures for development and redevelopment projects in order to reduce water quality impacts of stormwater runoff from the site for the life of the project. The types of development and redevelopment projects required to install permanent stormwater pollution prevention measures are listed

in the city's NPDES permit for stormwater, and the city's guidelines. Permanent stormwater quality pollution prevention measures shall be selected and designed to the satisfaction of the city in accordance with the guidelines contained in the most recent versions of the following documents:

1. City of Mountain View Storm Water Quality Guidelines for Development Projects; and
2. NPDES municipal stormwater discharge permit issued to the city by the California Regional Water Quality Control Board, San Francisco Bay Region.

Applicable development projects shall submit a stormwater management plan in accordance with the city's guidelines.

Section 8.163.1 – Establishment of a flood development permit.

A flood development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in Sec. 8.162.2. Application for a flood development permit shall be made on forms furnished by the building official and may include, but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

- Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; in zone AO, the elevation of highest adjacent grade and the proposed elevation of lowest floor of all structures; or
- Proposed elevation in relation to mean sea level (Bench Mark No. U-180) to which any structure will be floodproofed, if required in Sec. 8.164.1.c.3; and
- All appropriate certifications listed in Sec. 8.163.3.d of this article; and
- Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The standard conditions of approval related to hydrology and water quality include 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.

Construction Sediment and Erosion Control Plan

The applicant shall submit a written plan acceptable to the City which shows controls that will be used at the site to minimize sediment runoff and erosion during storm events. The plan should 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.

Landscape Design

Landscape design shall minimize runoff and promote surface filtration. Examples include: (a) no steep slopes exceeding 10%; (b) using mulches in planter areas without ground cover to avoid sedimentation runoff; (c) installing plants with low water requirements; and (d) installing appropriate plants for the location in accordance with appropriate climate zones. Identify which practices will be used in the building plan submittal.

Efficient Irrigation

Common areas shall employ efficient irrigation to avoid excess irrigation runoff. Examples include: (a) setting irrigation timers to avoid runoff by splitting irrigations into several short cycles; (b) employing multi-programmable irrigation controllers; (c) employing rain shutoff devices to prevent irrigation after significant precipitation; (d) use of drip irrigation for all planter areas which have a shrub density that will cause excessive spray interference of an overhead system; and (e) use of flow reducers to mitigate broken heads next to sidewalks.

Parking Garages

For multiple-level parking garages, interior levels shall be connected to an approved wastewater treatment system discharging to the sanitary sewer.

Outdoor Storage Areas (Including Garbage Enclosures)

Outdoor storage areas (for storage of equipment or materials which could decompose, disintegrate, leak, or otherwise contaminate stormwater runoff), including garbage enclosures, shall be designed to prevent the run-on of stormwater and runoff of spills by all of the following: (a) paving the area with concrete or other nonpermeable surface; (b) covering the area; and (c) sloping the area inward (negative slope) or installing a berm or curb around its perimeter. There shall be no storm drains in the outdoor storage area.

Stormwater Treatment (C.3)

This project will create or replace more than ten thousand (10,000) square feet of 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." The City's guidelines also describe the requirement to select Low-Impact Development (LID) types of stormwater treatment controls; the types of projects that are exempt from this requirement; and the Infeasibility and Special Projects exemptions from the LID requirement.

The “Stormwater Quality Guidelines for Development Projects” document requires applicants to submit a Stormwater Management Plan, including information such as the type, location, and sizing calculations of the treatment controls that will be installed. Include three stamped and signed copies of the Final Stormwater Management Plan with the building plan submittal. The Stormwater Management Plan must include a stamped and signed certification by a qualified Engineer, stating that the Stormwater Management Plan complies with the City’s guidelines and the State NPDES Permit. Stormwater treatment controls required under this condition may be required to enter into a formal recorded Maintenance Agreement with the City.

Hydromodification Management

Postconstruction stormwater runoff shall drain to approved permanent Hydromodification Management (HM) controls to mitigate increases in peak runoff flow and increased runoff volume. Projects that will decrease impervious surface area in comparison to the preproject condition are not subject to the HM requirement. Information related to this requirement, including the exemption criteria, is included in the City’s document entitled, “Hydromodification Management Plan Guidelines for Development Projects,” and the Santa Clara Valley Urban Runoff Pollution Prevention Program’s manual entitled, “C.3 Stormwater Handbook: Guidance for Implementing Stormwater Requirements for New and Redevelopment Projects.”

The City’s “Hydromodification Management Plan Guidelines for Development Projects” manual requires applicants to submit a Stormwater Management Plan, including information such as the type, location, and sizing requirements of the controls that will be installed. Include the Stormwater Management Plan with the building plan submittal. Property owners of projects that include stormwater controls constructed in accordance with this condition are required to enter into a formal recorded self-inspection and maintenance agreement with the City.

Stormwater Management Plan—Third-Party Engineer’s Certification

The Final Stormwater Management Plan must 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.

Full Trash Capture

Projects located in “moderate,” “high,” or “very high” trash generating areas as outlined in the City’s Long-Term Trash Load Reduction Plan that are undergoing site improvements shall install full trash capture protection within the existing storm drain system. Examples of full trash capture systems include large trash capture devices, such as hydrodynamic separators or media filtration systems, or small trash capture devices, such as storm drain catch basin connector pipe screens. Once installed, the property owner or property manager shall be responsible for maintaining the trash capture device. Maintenance shall be completed in accordance with the manufacturer’s recommended frequency, but at a minimum of one time per year. Indicate the type of full trash capture device that will be installed to remove trash from runoff for the entire project site, and include details for the installation of the trash capture system(s) in the building plans for the project.

Full Trash Capture (Off-Site Improvement)

Projects located in “moderate,” “high,” or “very high” trash generating areas as outlined in the City’s Long-Term Trash Load Reduction Plan that will construct off-site improvements to the public storm drain system shall install full trash capture protection within the newly constructed public storm drain system. Examples of full trash capture systems include large trash capture devices, such as hydrodynamic separators or media filtration systems, or small trash capture devices, such as storm drain catch basin connector pipe screens. Once installed, the property owner or property manager shall be responsible for maintaining the trash capture device. Maintenance shall be completed in accordance with the manufacturer’s recommended frequency, but at a minimum of one time per year. Indicate the type of full trash capture device that will be installed to remove trash from runoff for the entire project site, and include details for the installation of the trash capture system(s) in the building plans for the project.

AO Flood Zone

The site is located within Special Flood Hazard Zone AO, depth 1, and must comply with the drainage and flood control requirements of the City Code. The elevation of the lowest floor of the building must be at least 1’ above the highest adjacent grade and must be above elevation 12.75 (NAVD 88). The highest adjacent grade is defined as the highest natural elevation of the ground surface prior to construction next to the proposed walls of the structure. The applicant shall obtain a Flood Development Permit from the Public Works Department prior to issuance of a building permit, including foundation work. It is recommended this permit be obtained before the design of the building plans is complete in order to avoid potential redesign of the building.

Grading Requirements

For sites located within a special flood hazard zone, the grading or site plan must show the elevation of the finished pad, lowest floor, highest adjacent grade for Flood Zone AO, and base flood elevation for Flood Zone AE. All elevations must be referenced to a City elevation benchmark. The benchmark number, description, elevation, and datum year shall be noted on the grading plan.

4.9.4 Significance Criteria

The thresholds used to determine the significance of impacts related to hydrology and water quality are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- 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:
 - i) result in a substantial erosion or siltation on- or offsite;

- ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
or
 - iv) impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
 - Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Approach to Analysis

General

This environmental analysis of the potential impacts related to hydrology and water quality is based on a review of the results of a review of literature and database research and the City of Mountain View General Plan.

The Project would be regulated by the various laws, regulations, and policies summarized above in Section 4.9.3, *Regulatory Setting*. Compliance by the Project with applicable federal, state, and local laws and regulations is assumed in this analysis and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

After considering the implementation of the HEU as described in Chapter 3, *Project Description*, and assuming compliance with the required regulatory requirements, the environmental analysis below identifies if significance thresholds would be exceeded and, therefore, a significant impact would occur. For those impacts considered to be significant, mitigation measures are proposed to the extent feasible to reduce the identified impacts. This analysis assumes that projects proposed under the HEU would be subject to Mountain View development standards and requirements with respect to stormwater and flooding, as applicable.

Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Tsunamis and Seiches.** Implementation of the HEU would not risk release of contaminants due to tsunami. Despite being located next to the San Francisco Bay, the portion of Mountain View at risk to tsunamis is contained to the northern most portion of the City (along the shoreline). However, the HEU housing sites are located inland and/or outside tsunami evacuation zones. As such, they are not at risk to a tsunami. Implementation of the HEU would not risk release of contaminants due to seiches because the HEU housing sites are not located close enough to an enclosed or semi-enclosed water body. Therefore, there would be no impact with respect to tsunamis or seiches.

4.9.5 Impacts of the Project

Impact HYD-1: Implementation of the HEU would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (*Less than Significant*)

Development projects proposed under the City of Mountain View HEU would have a significant impact if such development would violate water quality standards or waste discharge requirements (WDR) *Order No. R2-2015-0049*, pursuant to NPDES *Permit No. CAS612008*, issued to Santa Clara County and in effect in the City of Mountain View. A violation could occur if the development would substantially increase pollutant loading levels in the sanitary sewer system, either through the direct introduction of contaminants generated by industrial land uses, or indirectly through stormwater pollution.

Construction

Construction of the housing units that could derive from the HEU's implementation would involve ground disturbing activities such as trenching and excavation, removal of trees and other vegetation, and grading. As soil disturbing activities occur across a landscape, the potential for erosion and sedimentation increases. Disturbed soils are typically more susceptible to erosion from rain and wind, which in the absence of preventative measures, can lead to mobilization of sediments and silt through runoff. Erosion can escalate under storm events where slopes are steep.

To accomplish such construction, heavy equipment such as bulldozers, graders, earth movers, heavy trucks, trenching equipment and other machinery is likely to be used. Such machinery could contribute pollutants to stormwater runoff in the form of sediment and other pollutants such as fuels, oil, lubricants, hydraulic fluid, or other contaminants. Additionally, site work could result in conditions of runoff. Sediment, silt, and construction debris, if mobilized during construction could be transported to receiving waters such as Stevens Creek, Permanente Creek, or its tributaries. Degradation of water quality could occur and affect beneficial uses of these water bodies (see Table 4.9-1). In the absence of runoff controls, exceedances of water quality standards could result.

However, as described in Section 4.9.3, Regulatory Setting, construction projects that disturb one or more acres of ground disturbance, or less than one acre but would be part of a larger plan of development or sale, would be required to obtain coverage under the NPDES Construction General Permit. Preparation of a SWPPP, along with its implementation during construction, is required to comply with the NPDES Construction General Permit. Moreover, development projects implemented under the HEU would be subject to controls and requirements described in Section 35.34 of the Mountain View Municipal Code which establishes permanent stormwater pollution prevention measures for development and redevelopment projects. This code specifies that a stormwater management plan be prepared for such projects, subject to the City's guidelines. Consistent with General Plan Policies INC-8.2, INC-8.4, and INC-8.4, these standards are needed to minimize pollutants in stormwater runoff and protect watercourses.

With adherence to regulatory standards and NPDES Construction General Permit requirements along with associated measures and best management practices described in the SWPPP,

construction activities would not generate water quality violations. The impact associated with construction activities would therefore be **less than significant**.

Operation and Maintenance

Once constructed, development proposed under the HEU would be subject to municipal stormwater requirements (Order No. R2-2015-0049) which regulates stormwater discharges from the City of Mountain View. The City of Mountain View Storm Water Quality Guidelines for Development Projects as well as Provision C.3 of the Municipal Regional Stormwater NDPES Permit contains post-construction stormwater control requirements that would be applicable to the HEU sites to ensure that ongoing stormwater exceedances do not occur. Compliance with the regulations cited would ensure that operational water quality impacts associated with the HEU's implementation would be **less than significant**.

Mitigation: None required.

Impact HYD-2: Implementation of the HEU would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (*Less than Significant*)

The consideration of groundwater sustainability impacts includes both the project's groundwater demand and its alteration of the recharge capability of the basins. If, for example, development of HEU projects were to require substantial quantities of groundwater during construction or operation, or if the development were to include placement of impervious surfaces to the extent that there would be an appreciable reduction in the overall recharge area for the groundwater basin, such activities could be considered potentially significant.

Construction

Projects proposed under the HEU would require water for their construction to suppress fugitive dust or for other construction purposes. As the projects have not been formally proposed, the estimated water demand associated with this construction is not currently known. However, it is likely that given the regional availability of recycled water, at least some portion of this demand could be met using recycled water. Moreover, based on the regulatory constraints outlined in the Water Shortage Contingency Plan, using potable water for construction is prohibited when recycled water is available. Therefore, construction would not substantially decrease groundwater supplies. Impacts associated with construction would be **less than significant**.

Operation

The City of Mountain View has a diverse portfolio of water supplies, including the SFPUC Regional Water System, Valley Water, City wells, and recycled water. The main water source for Mountain View is the SFPUC which supplies 84 percent of the City's water supply. The Regional System supplies approximately 85 percent of its water from the Tuolumne River, collected in Hetch Hetchy Reservoir in Yosemite National Park. A smaller portion of the City's water supply is provided by Valley Water, which is responsible for approximately 10 percent. Valley Water is responsible for the groundwater management in Santa Clara County including the Santa Clara

Valley Basin. The Santa Clara Valley Basin is not currently in condition of critical overdraft and is a high priority groundwater basin, subject to the provisions of SGMA. However, only 2 percent of the City of Mountain View's water supply production comes from groundwater (City of Mountain View, 2021a).

The projects constructed under the HEU would be in a defined groundwater basin, the Santa Clara Valley Basin. However, given that the City is not dependent on groundwater as its main water supply, which makes up approximately 2 percent of the water supply, this change would not substantially interfere with sustainable management of groundwater resources. Although the City depends on groundwater for dry year supplies, Valley Water's GWMP for the Santa Clara and Llagas subbasins establishes recharge facilities, recycled water systems, and conservation strategies in order to proactively manage groundwater resources. Impacts would be **less than significant** with no mitigation required.

Mitigation: None required.

Impact HYD-3: Implementation of the HEU 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: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows. (*Less than Significant*)

As discussed under Impact HYD-1, construction of the residential developments that could derive from the HEU's implementation project would entail the use of heavy equipment and would include greater than one-acre of ground disturbing activities for the development. Therefore, a Construction General Permit would be required under either scenario. Construction would entail alteration of the landscape and placement of impervious surfaces. In the absence of measures to capture runoff, impacts associated with erosion and siltation of local waterways could occur. Similarly, runoff could enter city stormdrains and result in capacity exceedances.

In addition to the Construction General Permit and its associated NPDES requirements, the projects constructed under the HEU would be subject to the stormwater regulations of the City of Mountain View. This analysis assumes that the projects considered under the HEU would be subject to and would implement projects in a manner consistent with Mountain View municipal code requirements.

In addition to the Construction General Permit and its associated NPDES requirements, the projects constructed under the HEU would be subject to the stormwater regulations of the MRP as the City of Mountain View and Santa Clara County are permittees of the MRP. As part of the review process for municipal development which creates or replaces 5,000 square feet of impervious surface area, a stormwater control plan would be required to be prepared. Compliance with provision C.3 of the MRP must be demonstrated at the time of application for a development

project including rezoning, tentative map, parcel map, conditional use permit, variance, site development review, design review, development agreement or building permit (SCVURPPP, 2016). Source control of pollution, site design, and stormwater treatment measures are required for new and redevelopment. In addition to providing treatment and source control, projects recreating or replacing an acre or more of impervious area (unless exempted) must also provide flow controls (or hydromodification management measures) so that post project runoff does not exceed estimated pre-project rates and durations. Regulated projects for which building or grading permits are issued (after January 1, 2016) must include Low Impact Development (LID) design measures (such as pervious paving or bioretention areas) for stormwater capture and pretreatment.

Mountain View Municipal Code Division 4 contains additional regulatory requirements for stormwater treatment at new and redevelopment projects. Project development proposed under the HEU would be required to demonstrate that stormwater capacity exceedances would not occur by completing and implementing a stormwater control plan for the projects. The types of development and redevelopment projects required to install permanent stormwater pollution prevention measures are listed in the City's NPDES permit for stormwater, and the city's guidelines. Applicable development projects will also be required to submit a stormwater management plan in accordance with the City's guidelines. Implementation of these regulatory requirements would effectively decrease the level of runoff and ensure that stormwater capacity exceedances associated with the projects would not occur.

As identified in Section 4.9.2, *Environmental Setting*, some of Mountain View is located within a special flood zone hazard. Consistent with Mountain View Municipal Code Section 8.163.1, a flood development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in Section 8.162.2. Adherence to permit conditions would ensure that flood flows are not redirected.

Adherence with the regulatory requirements and all associated BMPs would be sufficient to control impacts under this criterion. Based upon each of the considerations outlined above, the impact of the HEU's implementation on stormwater runoff, erosion, and storm drainage and flooding would be **less than significant**.

Mitigation: None required.

Impact HYD-4: Implementation of the HEU would not risk release of pollutants due to project inundation due to being located in a flood hazard zone. (*Less than Significant*)

Portions of the City are within the 100-year flood zones as determined by FEMA Flood Insurance Rate Maps. There are pipeline projects in the HEU sites inventory that are located in the 100-year flood zone, near US-101 and El Camino Real's crossing of Permanente Creek. In addition there is one opportunity site in the HEU sites inventory in the flood zone near El Camino Real and Miramonte Avenue. To reduce the potential impacts from the 100-year flood to new development, the projects developed as a result of the HEU within these zones would be required

to obtain a flood development permit as described in Section 8.163 and 8.164 of the City’s Municipal Code, and implement flood-proofing measures as required by the City’s Flood Hazard Ordinance. Implementation of the HEU would place structures within a 100-year flood hazard area, but conformance with the City’s standard conditions of approval would ensure that these flooding impacts would be **less than significant**.

Mitigation: None required.

Impact HYD-5: Implementation of the HEU would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (*Less than Significant*)

As discussed under HYD-1, the City of Mountain View has well defined policies and regulatory controls which would be implemented to protect water quality during construction and operation of the projects under the HEU. Mountain View is a co-permittee to the Phase II Small MS4 General Permit, which requires municipalities to implement controls to limit contamination of municipal stormwater. Consistent with this general permit, a stormwater control plan is required for development projects that meets the SCVURPPP Post Construction Manual standards. As described in the Mountain View municipal code, the project applicant shall implement conditions of approval that reduce stormwater pollutant discharges through the construction, operation and maintenance of source control measures, low impact development design, site design measures, stormwater treatment measures and hydromodification management measures.

With adherence to these regulatory standards including the conditions stipulated in the Stevens Creek and Permanente Creek TMDL, pollution prevention and good housekeeping measures, the projects proposed under the HEU would not conflict with either of the Basin Plans in effect in for lands within Mountain View.

Groundwater sustainability depends on multiple factors including water demand, maintenance of a diverse portfolio of water supply (surface water, imported water, recycled water) conservation, conditions for groundwater recharge, as well as the climate. In response to the current drought a Water Shortage Contingency Plan was developed by the City of Mountain View to respond to current drought conditions and alleviate its effects into the future.

As discussed in HYD-2, the City of Mountain View does not rely primarily on groundwater for its water supply. Therefore, the HEU would not conflict with Valley Water’s GWMP. Impacts would be **less than significant**.

Mitigation: None required.

4.9.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to hydrology and water quality could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on hydrology and water quality is defined as the Mountain View city limits.

Impact HYD-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on hydrology and water quality. (*Less than Significant*)

As described in Section 4.0, there are numerous other housing developments recently constructed, proposed to be constructed, or under design review approval consideration with the City. Construction and operation of such development could reasonably combine with the effects of development allowed by the Mountain View HEU to increase the severity of impacts with respect to water resources.

Cumulative Impacts during Project Construction

Significant cumulative impacts related to hydrology and water quality could occur if the incremental impacts of the proposed housing sites combined with the incremental impacts of cumulative development would adversely affect water quality or water supply. The construction activities for all cumulative development would be subject to the same regulatory requirements discussed for the proposed housing sites, ensuring compliance with existing hydrology and water quality regulations, including preparation and implementation of SWPPPs in compliance with the state Construction General Permit and local erosion control regulations. With compliance with existing regulations, the Project would not cause or contribute to a cumulatively considerable impact with respect to the use of erosion or water quality and impacts would be **less than significant**.

Cumulative Impacts during Project Operations

Projects involving the creation or replacement of 5,000 SF of impervious surface area would be subject to MS4 requirements, including hydromodification management controls and LID design standards and would be required to demonstrate in their stormwater control plans that run off from such disturbance is adequately controlled to prevent erosion or impacts to water quality. With compliance with existing regulations, the Project would not cause or contribute to a cumulatively considerable impact with respect to the use of erosion or water quality, and impacts would be **less than significant**.

Mitigation: None required.

4.9.7 Summary of Hydrology and Water Quality Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact HYD-1: Implementation of the HEU would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than Significant	None required	-
Impact HYD-2: Implementation of the HEU would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than Significant	None required	-
Impact HYD-3: Implementation of the HEU 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: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows.	Less than Significant	None required	-
Impact HYD-4: Implementation of the HEU would not risk release of pollutants due to project inundation due to being located in a flood hazard zone.	Less than Significant	None required	-
Impact HYD-5: Implementation of the HEU would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than Significant	None required	-
Impact HYD-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on hydrology and water quality.	Less than Significant	None required	-

4.9.8 References

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4.10 Land Use and Planning

4.10.1 Introduction

As presented in Chapter 3, *Project Description*, the project analyzed in this EIR would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Housing Element itself would contain an updated housing needs assessment; updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing; and a housing inventory that meets the requirements of State law and provides a buffer of additional housing development capacity. The Project would also include modifications to provisions in the City's General Plan Land Use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites. These proposed actions are collectively referred to as the Housing Element Update (HEU) or "the Project."

This section evaluates the potential for the Project to result in substantial adverse effects related to land use and planning. The *Environmental Setting* portion of this section includes descriptions of existing conditions relevant to land use and planning. Existing plans and policies relevant to land use and planning associated with implementation of the Project are provided in the *Regulatory Setting* section. Finally, the impact discussion evaluates potential effects related to land use and planning that could result from implementation of the Project in the context of existing conditions.

While an EIR may provide information regarding land use and planning issues, CEQA does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Adverse physical effects on the environment that could result from implementation of the Project, including the changes to land use addressed in this section, are evaluated and disclosed in the appropriate technical sections of this EIR.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments related to land use and planning received during the NOP comment period included concerns related to exposure to hazards, vehicle miles traveled (VMT), and greenhouse gas emissions associated with new housing that could be developed with implementation of the Project. While these topics are related to land use and planning, potential physical effects associated with these topics are addressed, where applicable, in the appropriate technical sections of this EIR, including section 4.7, *Greenhouse Gas Emissions*, section 4.8, *Hazards and Hazardous Materials*, and section 4.14, *Transportation*.

4.10.2 Environmental Setting

City of Mountain View

The City of Mountain View is located south of San Francisco at the southern end of the San Francisco Peninsula, where the Peninsula joins the Santa Clara Valley in northwestern Santa Clara County as shown in Figure 3-1 in Chapter 3, *Project Description*. The City of Mountain View is bordered by the cities of Palo Alto, Los Altos, and Sunnyvale, and also by the NASA-Ames/Moffett Federal Airfield complex to the east and the San Francisco Bay and tidal marshes to the north. Highways 101, 237, 82, and 85 run through the city.

The proposed Project would update the City of Mountain View’s Housing Element, which is a policy document that addresses housing issues and applies citywide. The housing sites inventory component of the housing element primarily identifies sites for development of multifamily housing that are principally located within the boundaries of adopted Precise Plans (discussed in the *Regulatory Setting* below) and along commercial corridors, though housing sites in other parts of the City are also included.

4.10.3 Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to land use and planning are applicable to the proposed implementation of the Project.

State

Housing Element Requirements

State law requires that housing elements be updated every eight years (California Government Code Section 65588). The housing element must identify residential sites adequate to accommodate a variety of housing types for all income levels and to meet the needs of special population groups, such as the elderly, persons with disabilities, large families, farmworkers, families with female heads of households, and families and persons in the need for emergency shelter (California Government Code Section 65583). State law mandates that all cities and counties zone land appropriately to accommodate the increasing needs of regional population growth. Regional housing needs are determined by the California Department of Housing and Community Development (HCD).

The City’s Housing Element was last updated in 2014, and covers the “5th Cycle” housing element planning period from 2014 through 2022. Because this period is drawing to a close, State law [California Government Code Section 65588] requires the City to update its Housing Element by the deadline of January 31, 2023. In accordance with State law, the planning period for the updated Housing Element is from January 31, 2023 to January 31, 2031 and is referred to as the “6th cycle.”

There have been substantial changes to state laws regarding housing in the recent years, including changes to housing element requirements (for example requiring that housing elements

affirmatively further fair housing), changes to facilitate production of Accessory Dwelling Units (ADUs) and other forms of housing, and changes that limit local agencies' ability to condition or deny applications for affordable housing. These changes are codified in the California Government Code, including in Chapter 3, Article 10.6, *Housing Elements* (Section 65580 et seq.) and elsewhere.

Regional

Association of Bay Area Governments Area Governments and RHNA

The Association of Bay Area Governments (ABAG) is the comprehensive regional planning agency and council of governments for the nine-county San Francisco Bay Area Region. Its members include the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma counties and 101 cities and towns of the San Francisco Bay Region.

ABAG determines the distribution of affordable housing in the region through its Regional Housing Needs Allocation (RHNA) process. As discussed in Chapter 3, *Project Description*, for the period from 2023 to 2031, HCD has identified a regional housing need of 441,176 housing units in the Bay Area, which ABAG was responsible for distributing to local jurisdictions via adoption of its final RHNA Plan in December 2021.¹ Each jurisdiction's RHNA includes requirements for very low income, low income, moderate income, and above moderate households.

Plan Bay Area 2050

The Metropolitan Transportation Commission (MTC) is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area and is the government agency responsible for regional transportation planning and financing. Plan Bay Area 2050, prepared by the ABAG and MTC, is the official regional long-range plan to improve housing, the economy, transportation, and the environment across the San Francisco Bay Area Region, and includes the region's Sustainable Communities Strategy as required under SB 375, and the Regional Transportation Plan.

Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to take over the next five years to make headway on each of the 35 strategies.

Between 2015 and 2050, Plan Bay Area 2050 estimates the Bay Area will add 1.4 million new jobs, for a total of 5.4 million bay area workers. Household growth is anticipated to follow pace, adding slightly fewer than 1.4 million new households for a total of 4 million households by 2050. This growth would bring the Bay Area's population to an estimated 10.3 million residents

¹ Association of Bay Area Governments (ABAG), 2021. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031*. Available https://abag.ca.gov/sites/default/files/documents/2021-12/Final_RHNA_Allocation_Report_2023-2031-approved_0.pdf. December 2021. Accessed on April 14, 2022.

by 2050, up from around 7.8 million in 2021. Plan Bay Area 2050 estimates the region would need to build another 1.4 million new homes by 2050 to meet forecasted future demand.² Because it will be several years before these growth projections are understood on a jurisdictional level and incorporated into regional and local transportation models, growth projections contained in Plan Bay Area 2040 represent the best available information for use in this EIR.³

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies, and graphics that convey a long-term vision and guide local decision-making to achieve that vision. Included in the 2030 General Plan are land use designations and a land use map. Land use designations define the type, intensity and density of development within the City, and include five general groups: Residential; Commercial; Office/Industrial; Mixed-Use; and Public/Institutional. Multifamily residential uses are allowed under the Residential and Mixed-Use land use designations at varying densities ranging from 7 to 80 dwelling units per acre in residential designations or 1.05 to 3.0 FAR in mixed-use designations.

The Land Use and Design Element of the General Plan includes the following policies that are relevant to the land use and planning evaluation for the Project.

Goal LUD-3: A diverse, balanced and flexible mix of land uses that supports a strong economy, complete neighborhoods, transit use and community health.

Policy 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.

Policy LUD 3.2: Mix of land uses. Encourage a mix of land uses, housing types, retail and public amenities and public neighborhood open spaces accessible to the community.

Policy LUD 3.3: Health. Promote community health through land use and design.

Policy LUD 3.4: Land use conflicts. Minimize conflicts between different land uses.

Policy LUD 3.5: Diversity. Encourage residential developments serving a range of diverse households and incomes.

Goal LUD-6: Distinctive neighborhoods that preserve and enhance the quality of life for residents.

Policy LUD 6.1: Neighborhood character. Ensure that new development in or near residential neighborhoods is compatible with neighborhood character.

² Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), 2021. *Plan Bay Area 2050*. Final. Released October 1, 2021. Available: <https://www.planbayarea.org/finalplan2050>. Accessed April 14, 2022.

³ Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), July 2017. *Plan Bay Area 2040; Projections 2040*. Available online <http://projections.planbayarea.org/>. Accessed April 21, 2022.

Goal LUD-7: A vibrant Downtown that serves as the center for Mountain View social and civic life.

Policy LUD 7.5: Compatible uses and design. Ensure compatible uses and building design Downtown along the boundaries between residential and commercial areas.

Goal LUD-9: Buildings that enhance the public realm and integrate with the surrounding neighborhood.

Policy LUD 9.1: Height and setback transitions. Ensure that new development includes sensitive height and setback transitions to adjacent structures and surrounding neighborhoods.

Policy LUD 9.2: Compatible transit-oriented development. Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations.

Precise Plans

To address site-specific development needs, the City has developed 25 Precise Plans covering various locations within the City. Precise Plans are a tool for coordinating future public and private improvements on specific properties where special conditions of size, shape, land ownership, or existing or desired development require particular attention. The Precise Plans provide detailed specifications for land uses, relationship to surrounding areas, use intensity, circulation, design, procedures for development review, and special conditions for development occurring within each Precise Plan area. The City's Precise Plan areas are shown in Figure 3-2 in Chapter 3, *Project Description*. In the City, Precise Plans range from a small 3-acre development to large neighborhoods. The Precise Plans covering the largest areas and with the highest development potential as relevant to the Project are described below.

East Whisman Precise Plan

The East Whisman Precise Plan (adopted November 5, 2019, as amended through October 13, 2020) advances a sustainable, transit-oriented area with complete mixed-use neighborhoods and enhanced area mobility in an approximately 412-acre area on the eastern border of the City. It includes land use and development regulations for up to 2 million square feet of net new office uses, 100,000 square feet of retail uses, 200 hotel rooms, and 5,000 multi-family residential units (with goal of making 20 percent of the total residential units affordable).

North Bayshore Precise Plan

The North Bayshore Precise Plan (adopted November 25, 2014, as amended through December 7, 2021) supports transition of an approximately 650-acre area in the northern portion of the City into an innovative, sustainable, and complete mixed-use district that protects and stewards biological habitat and open space, and continues its role as a major high-technology employment center. The original North Bayshore Precise Plan did not include residential uses, but updates to the development standards and design guidelines of the plan adopted in December 2017 added residential uses in the areas designated for mixed-use development. The North Bayshore Precise Plan provides guiding principles, development standards, and design guidelines for up to 9,850 new multi-family residential units and 3.6 million square feet of office and commercial

development. The North Bayshore Precise Plan has a target of approximately 20 percent of residential units to be affordable.

El Camino Real Precise Plan

The El Camino Real Precise Plan (adopted November 17, 2014, as amended through April 13, 2021) provides planning priorities, development regulations, and an implementation strategy for the 3.9-mile stretch of the El Camino Real that runs through Mountain View. The El Camino Real Precise Plan contains direction for potential street improvements and implementation actions, standards, and guidelines for new residential densities and focused commercial areas.

San Antonio Precise Plan

The San Antonio Precise Plan (adopted December 2, 2014, as amended through November 17, 2020) guides the transformation of the existing regional commercial area into a mixed-use core within a broader existing residential neighborhood, taking into account the area's proximity to transit services and location along two of the most heavily traveled corridors in the City: El Camino Real and San Antonio Road. The San Antonio Precise Plan identifies planning principles and policies, development regulations, mobility improvements and an implementation strategy for approximately 123 acres of land, including and surrounding the San Antonio Center shopping area. It also includes new allowances for higher densities of housing, and an office cap of 600,000 square feet.

City of Mountain View Zoning Ordinance

The Zoning Ordinance serves as an implementing tool for the General Plan by establishing detailed, parcel-specific development regulations and standards in each area of the City. Although the two are distinct documents, the Mountain View General Plan and Zoning Ordinance are closely related, and State law mandates that zoning regulations be consistent with the General Plan maps and policies.

Development standards identified in the Zoning Ordinance include setbacks, lot area, lot width, density, floor area ratio, site coverage, landscaping and open area requirements, height limits, storage, and parking. The Zoning Ordinance organizes zoning districts into four broad categories: residential; commercial/professional; industrial; and special purpose. Multifamily residential units are permitted uses under the R3 (Residential—Multiple-Family), R4 (Residential—High-Density Multiple-Family), and Planned community (P) districts.

4.10.4 Significance Criteria

The thresholds used to determine the significance of impacts related to land use and planning are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Physically divide an established community.
- 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.

Approach to Analysis

The analysis of potential impacts related to land use and planning evaluates the potential for the Project to result in substantial adverse effects related to land use and planning, including physical division of an established community and the potential for implementation of the Project to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

As detailed in Chapter 3, *Project Description*, the Project would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Project would also include amendments to other elements of the General Plan in order to maintain internal consistency between the General Plan, the zoning ordinance, and adopted Precise Plans. The Project would also include modifications to provisions in the City's General Plan Land Use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory.

Because these zoning and policy changes are part of the Project, by definition the Project would not conflict with them, and the analysis does not consider inconsistency with existing plan policies or codes to necessarily be indicative of significant environmental impacts. As previously discussed, consistent with CEQA, the analysis does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Adverse physical effects on the environment that could result from implementation of the Project, including the changes to land use addressed in this section, are evaluated and disclosed in the appropriate technical sections of this EIR.

4.10.5 Impacts of the Project

Impact LUP-1: Implementation of the HEU would not physically divide an established community. (*Less than Significant*)

As presented in Chapter 3, *Project Description*, the Project would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Housing Element itself would contain an updated housing needs assessment; updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing; and a housing inventory that meets the City's RHNA and provides a buffer of additional housing development capacity. The Project would also include amendments to other elements of the General Plan in order to maintain internal consistency between the General Plan, the zoning ordinance, and adopted Precise Plans. The Project would also include modifications to provisions in the City's General Plan Land Use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory.

As detailed in Section 3.4.1, *Housing Sites Inventory*, in Chapter 3, *Project Description*, the Project would include a number of strategies as provided for in State law and HCD guidance to address the requirements for a housing inventory and meet the City's 6th Cycle RHNA plus a

buffer. While strategies and sites included in the Project will be refined based on community input and analysis as the EIR is being prepared, this EIR analyzes the impacts associated with the possible increase in housing production assuming use of the aforementioned strategies to plan for up to approximately 15,000 units, to the year 2031 focused primarily along the commercial corridors and in areas that currently accommodate commercial/industrial uses, mixed uses, and/or multifamily housing. Of the total units it is assumed that approximately 1,400 units would be enabled by changes in development capacity via rezoning. The balance of 13,600 units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. Future development on identified sites would continue to be at the discretion of individual property owners and will be largely dependent on market forces and, in the case of affordable housing, available funding and/or other incentives. Nonetheless, the analysis in this EIR conservatively assumes build-out of the sites inventory. In addition, the analysis in this EIR also considers approximately 2,700 units beyond 2031 that would be enabled by changes in development capacity via rezoning.

While implementation of the HEU would result in the development of new housing and housing at higher densities than currently exist in some areas, as well as related amendments to other elements of the City's General Plan, zoning ordinance, and Precise Plans, these changes would not alter the physical layout of the City such that movement within or across the housing sites or the City would be obstructed. The HEU also does not propose any roadways, such as freeways, that would divide the City or isolate individual neighborhoods within it. Consequently, implementation of the HEU would have a **less-than-significant impact** related to the division of an established community.

Mitigation: None required.

Impact LUP-2: Implementation of the HEU 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. (*Less than Significant*)

As previously discussed, while an EIR may provide information regarding land use and planning issues, CEQA does not consider inconsistency with land use plans and policies to be a physical effect on the environment unless the plan or policy was adopted for the purpose of avoiding or mitigating a significant environmental effect. Adverse physical effects on the environment that could result from implementation of the HEU, including the changes to land use addressed in this section, are evaluated and disclosed in the appropriate technical sections of this EIR.

As presented in Chapter 3, *Project Description*, and as discussed above in Impact LUP-1, the Project would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Project would also include amendments to other elements of the General Plan in order to maintain internal consistency between the General Plan and zoning/Precise Plans. The Project would also include modifications to provisions in the City's General Plan Land Use map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory.

Implementation of the HEU would result in the development of new housing and housing at higher densities than currently exist in some areas. However, as part of the approval of the Project, existing policies and zoning would be amended to reflect the new conditions. In addition, the HEU would explain the City's RHNA requirements and include policies necessary to advance the City's housing program notwithstanding potentially competing policies in the currently adopted General Plan or Precise Plans. Consequently, the Project would not cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the impact would be **less than significant**.

Mitigation: None required.

4.10.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to land use and planning could occur if the incremental impacts of the Project combined with the impacts of cumulative development identified in Section 4.0.3, *Cumulative Impacts*.

Impact LUP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not physically divide an established community. (Less than Significant)

As noted in Section 4.0.3, *Cumulative Impacts*, the proposed HEU is a plan which provides the potential for increased residential development in specific locations across a broad geography, and Project-related growth in housing would combine with other, cumulative growth and development projects in the City. However, it is reasonable to assume that this growth would occur within the existing framework formed by roads and infrastructure. Also, as discussed above in Impact LUP-1, while implementation of the HEU would result in the development of new housing and housing at higher densities than currently exist in some areas, as well as related amendments to other elements of the City's General Plan, zoning ordinance, and Precise Plans, these changes would not alter the physical layout of the City such that movement within or across the housing sites or the City would be obstructed. The Project also does not propose any roadways, such as freeways, that would divide the City or isolate individual neighborhoods within it. Consequently, cumulative impacts related to division of an established community would be **less than significant**.

Mitigation: None required.

Impact LUP-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, 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. (*Less than Significant*)

As discussed under Impact LUP-2, implementation of the HEU 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. Other jurisdictions in the Bay Area are also updating their housing elements in response to meet RHNA requirements, and those jurisdictions would also update and amend their general plans and zoning codes, as applicable, to ensure planned and orderly growth that 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. Consequently, cumulative impacts related to conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be **less than significant**.

Mitigation: None required.

4.10.7 Summary of Land Use and Planning Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact LUP-1: Implementation of the HEU would not physically divide an established community.	Less than Significant	None required	-
Impact LUP-2: Implementation of the HEU 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.	Less than Significant	None required	-
Impact LUP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not physically divide an established community.	Less than Significant	None required	-
Impact LUP-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, 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.	Less than Significant	None required	-

4.10.8 References

Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), July 2017. Plan Bay Area 2040; Projections 2040. Available: <http://projections.planbayarea.org>. Accessed on April 21, 2022.

City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021. Available: <https://www.mountainview.gov/civicax/filebank/blobdload.aspx?blobid=10702>. Accessed May 1, 2022.

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4.11 Noise and Vibration

4.11.1 Introduction

This section assesses the potential for the Housing Element Update (HEU) to result in significant adverse impacts from noise. This section first includes a description of the existing environmental setting as it relates to noise and vibration, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the HEU from noise and vibration.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to noise or vibration were received during the NOP comment period.

4.11.2 Environmental Setting

Existing Noise-Sensitive Land Uses

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause physiological and psychological stress and hearing loss. Given these effects, some land uses are considered more sensitive to noise levels than others due to the duration and nature of time people spend at these uses. In general, residences are considered most sensitive to noise as people spend extended periods of time in them, including the nighttime hours. Therefore, noise impacts to rest and relaxation, sleep, and communication are highest at residential uses. Schools, hotels, hospitals, nursing homes, and recreational uses are also considered to be more sensitive to noise as activities at these land uses involve rest and recovery, relaxation and concentration, and increased noise levels tend to disrupt such activities. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate, are also sensitive to noise but due to the limited time people spend at these uses, impacts are usually tolerable. Commercial and industrial uses are considered the least noise-sensitive.

Existing Noise Environment

The noise environment in and around the city is influenced by vehicular traffic, such as along Interstate 280 (I-280) U.S. Highway 101, State Highway (SR) 85, SR 237 and SR 82 (El Camino Real as well as local roadways such as Central Expressway. Other noise sources in the vicinity include the Valley Transportation A light rail and Caltrain rail operations, including warning bells and required horn blasts at at-grade crossings. Aircraft operations from Palo Alto Airport and Moffett Field also contribute to the noise environment of Mountain View. Noise-monitoring results conducted for the 2030 General Plan show that existing noise levels throughout the city ranged from 51.2 to 72.1 dBA Leq. The calculated Ldn at the long-term 24-hour noise monitoring location is 65 dBA Ldn. This range of noise level is typical of an urbanized setting that is not located near busy streets. In addition to roadway traffic, aircraft flights, landscaping maintenance

equipment, construction, loading and unloading, commercial activities and everyday neighborhood activities contribute to the ambient noise environment.

4.11.3 Regulatory Setting

Federal

Noise Control Act

In 1972, the Noise Control Act was established to address the concerns of noise as a growing danger to the health and welfare of the Nation's population, particularly in urban areas. In 1974, in response to the Noise Control Act, the U.S. Environmental Protection Agency (EPA) published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.¹ **Table 4.11-1** summarizes U.S. EPA findings for residential land uses.

**TABLE 4.11-1
 SOUND LEVELS THAT PROTECT PUBLIC HEALTH (dBA)**

Category	Measure of Exposure	Indoor			Outdoor		
		Activity Interference	Hearing Loss	To Protect Against Both Effects	Activity Interference	Hearing Loss	To Protect Against Both Effects
Residential with Outside Space	L _{dn}	45	70	45	55	70	55
Residential with No Outside Space	L _{dn}	45	70	45	-	-	-

NOTES:

Sound levels are yearly average equivalent in decibels; the exposure period which results in hearing loss at the identified level is a period of forty years.

SOURCE: U.S. Environmental Protection Agency, Information of Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an adequate Margin of Safety, 1974.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) aims to ensure worker safety and health in the United States by working with employers and employees to create better working environments. With regard to noise exposure and workers, OSHA regulations set forth accepted criteria to protect the hearing of workers exposed to occupational noise. Noise exposure regulations are listed in 29 Code of Federal Regulations (CFR) Section 1910.95. Section 1910.95(c)(1) states that an employer shall administer a hearing conservation program whenever noise exposure levels equal or exceed an 8-hour time-weighted average sound level of 85 dBA.

Federal Aviation Administration

The Federal Aviation Administration (FAA) has published guidelines for land use compatibility in 14 CFR Part 150. For aviation noise analyses, the FAA has determined that the 24-hour

¹ U.S. Environmental Protection Agency (U.S. EPA), 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an adequate margin of Safety. March 1974.

cumulative exposure of individuals to noise resulting from aviation activities must be established in terms of L_{dn} as FAA's primary metric. However, the FAA recognizes CNEL as an alternative metric for assessing aircraft (e.g., helicopters) noise exposure in California.

Based on FAA standards, a significant noise impact would occur if analysis shows that the project would cause noise sensitive areas to experience an increase in the aircraft noise level of 1.5 dB CNEL or more when aircraft levels are 65 dBA CNEL or higher. In addition, a significant noise impact would occur if noise sensitive land uses would be newly exposed to levels of 65 dBA CNEL or higher as a result of a project. For example, a 1.5 dB increase at an aircraft noise level of 63.5 dBA CNEL that brings the aircraft noise level to 65 dBA CNEL would be considered a significant impact.

According to Chapter 65 of Title 42 of the United States Code, and Articles 3 and 3.5 of Chapter 4 of Division 9 of the Public Utilities Code of the State of California, local enforcement of noise regulations and land use regulations related to noise control of airports (e.g., helistops) are preempted by the FAA.

State

Title 24

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new dwellings.

Department of Industrial Relations

The Division of Occupational Safety and Health (DOSH) protect workers and the public from safety hazards through its California Divisions of Occupational Safety and Health (Cal/OSHA) program. The Cal/OSHA Program is responsible for enforcing California laws and regulations pertaining to workplace safety and health and for providing assistance to employers and workers about workplace safety and health issues. DOSH enforces noise standards in the workplace in conjunction with OSHA through the CAL/OSHA program.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Noise Element of the General Plan includes the following policies related to noise (City of Mountain View, 2012).

Goal NOI-1: Noise levels that support a high quality of life in Mountain View.

Policy NOI 1.1: Land use compatibility. Use the Outdoor Noise Environment Guidelines as a guide for planning and development decisions (Table 7.1, illustrated below).

Policy 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 Ldn for exterior noise in private outdoor active use areas.
- New multi-family residential developments shall maintain a standard of 65 dBA Ldn 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 Ldn 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.

Policy 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.

Policy NOI 1.4: Site planning. Use site planning and project design strategies to achieve the noise level standards in NOI 1.1 (Land use compatibility) and in NOI 1.2 (Noise-sensitive land uses). The use of noise barriers shall be considered after all practical design-related noise measures have been integrated into the project design.

Policy NOI 1.5: Major roadways. Reduce the noise impacts from major arterials and freeways.

Policy NOI 1.6: Minimize noise impacts on noise-sensitive land uses, such as residential uses, schools, hospitals and child-care facilities.

Policy NOI 1.7: Stationary sources. Restrict noise levels from stationary sources through enforcement of the Noise Ordinance.

Policy NOI 1.8: Moffett Federal Airfield. Support efforts to minimize noise impacts from Moffett Federal Airfield in coordination with Santa Clara County's Comprehensive Land Use Plan.

Policy NOI 1.9: Rail. Reduce the effects of noise and vibration impacts from rail corridors.

Table 7.1 Outdoor Noise Environment Guidelines

Land Use Category	Community Noise Exposure in Decibels (CNEL) Day/Night Average Noise Level in Decibels (Ldn)						
	55	60	65	70	75	80	85
Residential-Single-Family, Duplex, Mobile Homes	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Residential-Multi-Family, Transient Lodging-Motels, Hotels	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Auditoriums, Concert Halls, Amphitheatres, Sports Arenas, Outdoor Spectator Sports	Conditionally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Playgrounds, Neighborhood Parks	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Office Buildings, Business, Commercial and Professional	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Conditionally Acceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Conditionally Acceptable	Clearly Unacceptable	Clearly Unacceptable

- 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.
- CLEARLY UNACCEPTABLE**
New construction or development clearly should not be undertaken.

Source: State of California General Plan Guidelines, 2003.

Mountain View Municipal Code

The City of Mountain View addresses noise regulations to help protect the community from exposure to excessive noise and also specify how noise is measured and regulated. The City’s codes address noise issues and protect the community from exposure to excessive noise from sources such as construction activity, animals, amplified sound and stationary equipment. These codes specify how noise is measured and regulated. The City’s Zoning Ordinance also includes noise regulations and standards for uses such as drive-in and drive-through sales, commercial, and industrial land uses and sensitive uses, such as child-care centers. In addition, noise is

regulated through project conditions of approval. The Mountain View Police Department and the City Attorney's office enforce noise violations.

Section 8.70.1 of the City's Municipal 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. Authorized land uses and construction activity established through the discretionary land use permit process may be subject to specific noise conditions of approval that may be more restrictive. 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.

Section 21.26 of the City's Municipal Code establishes quantitative noise level limits on noise from stationary equipment (such as heating, ventilation, and air conditioning mechanical systems, and air compressors). 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.) at a residential receiving property, unless it has been demonstrated that such operation will not be detrimental to the health, safety, peace, morals, comfort or general welfare of the residents subjected to such noise, and the use has been granted a permit by the Zoning Administrator.

Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to noise and vibration, as summarized below.

Vibration and Settlement Plan for Projects Adjacent to Historic Structures or Zero-Lot-Line Structures

At building permit submittal, the applicant shall prepare a Vibration and Settlement Plan which specifies monitoring and mitigation measures to avoid damage to the adjacent building(s) as a result of project construction. Approved monitoring protocols shall be in place prior to issuance of any building permits for the project.

Rooftop Equipment Screen

All rooftop equipment must be concealed behind opaque (solid) screening designed to complement the building design such that rooftop equipment is not visible from any elevation. Details of the rooftop equipment and roof screens shall be included in the building permit drawings and approved by the Zoning Administrator.

Mechanical Equipment - Ground Screening

All mechanical equipment, such as air condenser (AC) units or generators, shall be concealed behind opaque screening. No mechanical equipment is permitted on front porches or balconies but may be located in the fenced yard area or building rooftops.

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.

Interior Noise Levels

Construction drawings must confirm that measures have been taken to achieve an interior noise level of 45 dB(A)Ldn that shall be reviewed and approved by a qualified acoustical consultant prior to building permit submittal.

Construction Noise Reduction Measures

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 practical 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; and (e) shroud or shield impact tools and use electric-powered rather than diesel-powered construction equipment.

Work Hours/Construction Site Signage

No work shall commence on the job site prior to 7:00 a.m. nor continue later than 6:00 p.m., Monday through Friday, nor shall any work be permitted on Saturday or Sunday or any holiday unless prior approval is granted by the Chief Building Official. The general contractor, applicant, developer, or property owner shall erect a sign at all construction site entrances/exits to advise subcontractors and material suppliers of the working hours and contact information, including an after-hours contact. Violation of this condition of approval may be subject to the penalties outlined in Section 8.6 of the City Code and/or suspension of building permits.

Construction Parking

The applicant shall prepare a construction parking management plan to address parking demands and impacts during the construction phase of the project by contractors or other continued operations on-site. The plan shall also include a monitoring and enforcement measure which specifies on-street parking is prohibited and will be monitored by the owner/operator of the property (or primary contractor), and penalties will be enforced by the owner/operator of the property (or primary contractor) for violations of on-street parking restrictions. Violations of this provision may result in a stop-work notice being issued by the City for development project. The construction parking management plan shall be subject to review and approval by the Zoning Administrator prior to the issuance of building permits.

Notice of Construction

The applicant shall notify neighbors within at least 300' of the project site of the construction schedule in writing, prior to construction. For multi-phased construction, separate notices may be required for each phase of construction. A copy of the notice and the mailing list shall be submitted for review prior to issuance of building permits.

Disturbance Coordinator

The applicant shall designate a “disturbance coordinator” who will be responsible for responding to any local complaints regarding construction noise. The coordinator (who may be an employee of the general contractor) will determine the cause of the complaint and will 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.

Vibration Best Management Practices Construction Measures

- Avoid impact pile driving and drill piles instead where possible. Drilled piles cause lower vibration levels where geological conditions permit their use.
- Avoid using vibration rollers and tampers near sensitive areas.
- In areas where project construction is anticipated to include vibration generating activities, vibration studies shall be conducted to determine the areas of impact and to present appropriate mitigation measures that may include the following:
 - Identification of sites that would be exposed to project vibration compaction activities and could result in vibration impacts to structures;
 - Develop a vibration monitoring and contingency plan;
 - Construction contingency plan; and
 - Conduct post-survey on structures where either monitoring has indicated high levels or complaints of damage have been made.

4.11.4 Significance Criteria

The thresholds used to determine the significance of impacts related to noise and vibration are based on Appendix G of the *CEQA Guidelines*. Implementation of the HEU could have a significant impact on the environment if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Generate excessive groundborne vibration or groundborne noise levels.
- 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, expose people residing or working in the project area to excessive noise levels.

Approach to Analysis

Topics Considered and No Impact Determined

The HEU would have no impact to the following topics based on the HEU characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- ***Expose people or structures to or generate excessive groundborne noise levels.*** The second criterion above relates to groundborne vibration and groundborne noise levels, but only the issue of groundborne vibration is relevant to the HEU. Groundborne noise occurs when vibrations transmitted through the ground result in secondary radiation of noise. Groundborne noise is generally associated with underground railway operations and with construction activities such as blasting, neither of which are likely to result from implementation of the proposed HEU. Future planned development within the City would not involve equipment that would produce groundborne vibration; therefore, no impacts related to the exposure of people or structures to, or the generation of, excessive groundborne noise levels would occur in connection with project operations. The potential for construction activities to result in groundborne vibration is addressed below in Impact NOI-3.
- ***Projects located within the vicinity of a private air strip or an airport land use plan.*** The HEU planning area is not within the vicinity of a private airstrip or an airport land use plan area. The nearest airport to the City of Mountain View is Moffet Federal Airfield, approximately .50 miles to the nearest residential property. The 65 dBA noise contours for airport operations are contained within the area bounded by the intersections of Mary Ave and West Maude Ave, Mathilda Ave and Evelyn Ave, Evelyn Ave and Sunnyvale Ave, and the Highway 101/Highway 237 interchange (SCC, 2012). Therefore, the subsequent lease, development, and improvement projects (subsequent projects) that could occur under the Housing Element would not result in the long-term exposure of people residing or working in the area to excessive airport-related noise levels.

Additionally, the California Supreme Court's *California Building and Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)* decision² has indicated that the impact of existing environmental conditions on a project's future users or residents are generally not required to be considered in a CEQA evaluation, except when the project may exacerbate existing hazards or existing conditions. CEQA analysis is therefore concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents. Thus, with respect to existing traffic noise and existing rail noise and vibration on proposed sensitive land uses, the city is not required under CEQA to consider the effects of locating new receptors into an area where such noise and vibration levels already exist. Therefore, traffic and railroad noise exposure and rail vibration on future sensitive receptors within the city are not assessed in this Draft EIR. It should be noted, however, that *CBIA v. BAAQMD* decision does not preclude jurisdictions like the city from considering these types of impacts during its own planning and development review processes.

4.11.5 Impacts of the Project

Impact NOI-1: Implementation of the HEU would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (*Less than Significant*)

Under the HEU, the primary source of temporary noise within the City would be from demolition and construction. Construction activities within the City would involve both off-road construction equipment (e.g., excavators, dozers, cranes, etc.) and transport of workers and equipment to and

² *California Building Industry Association v. Bay Area Air Quality Management District*, S213478. (A135335, A136212; 218 Cal.App.4th 1171; Alameda County Superior Court; RG10548693. Filed December 17, 2015.)

from construction sites. **Table 4.11-2** shows typical noise levels produced by the types of off-road equipment that would likely be used during future construction areas within the City.

**TABLE 4.11-2
 REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS (50 FEET FROM SOURCE)**

Type of Equipment	L _{max} , dBA	Hourly L _{eq} , dBA/Percent Use ^a
Backhoe	80	76/40
Jackhammer	85	78/20
Roller	85	78/20
Compactor	80	73/20
Paver	85	82/50
Crane	85	77/16
Grader	85	81/40
Concrete Mixer Truck	85	81/40
Loader	80	76/40
Air Compressor	80	76/40
Excavator	85	81/40

NOTES:

^a Percent used during the given time period (usually an hour – hourly L_{eq}) were obtained from the FHWA Roadway Construction Noise Model User's Guide.

SOURCE: FHWA, 2006.

Construction noise is a major source of temporary noise within the City and would continue to be so regardless of whether or not the HEU is adopted. Noise levels near individual construction sites under the proposed HEU would not be substantially different from what they would be under the existing Housing Element. Since specific future projects within the City are unknown at this time, it is conservatively assumed that the construction areas associated with these future projects could be located within 50 feet of sensitive land uses. To quantify construction-related noise exposure at the nearest sensitive land uses, it is assumed that the two loudest pieces of construction equipment would operate within 50 feet of a sensitive receptor.

Under the HEU, sensitive receptors located within 50 feet of an excavator or other construction equipment producing similar levels of noise could be exposed to a noise level of 82 dBA L_{eq}. However, Section 8.70 Construction noise (a) Hours of construction specifically states no construction activity shall commence prior to 7:00 a.m. nor continue later than 6:00 p.m., Monday through Friday, nor shall any work be permitted on Saturday or Sunday or holidays unless prior written approval is granted by the chief building official. In addition, the following City of Mountain View Standard Conditions of Approval (Construction Noise Reduction Measures), (Work Hours/Construction Site Signage), (Construction Parking), (Notice of Construction), and (Disturbance Coordinator) would be required of development under the HEU which would further reduce construction noise levels.

Therefore, with required implementation of these construction best management practices and adherence to the City's allowed hours of construction, impacts associated with future construction activities under the HEU with respect to conflicting with local noise standards would be **less than significant**.

Mitigation Measure: None required.

Impact NOI-2: Stationary noise sources from development within the HEU area would not result in a substantial 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. (*Less than Significant*)

Unlike industrial uses and some commercial land uses, residential uses are not typically associated with excessive noise generation. Characteristics of residential uses that are noise-producing include stationary source noises such as air conditioning equipment and pool equipment which generally do not generate substantial noise levels. At the present time, the type, size, and the location of any air handling equipment that may be associated with housing developed under the HEU is unknown. However, Section 21.26 of the City's Municipal Code establishes quantitative noise level limits on noise from stationary equipment (such as heating, ventilation, and air conditioning mechanical systems, and air compressors). 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.) at a residential receiving property.

In addition, the following City of Mountain View Standard Conditions of Approval (Rooftop Equipment Screen), (Mechanical Equipment - Ground Screening), and (Mechanical Equipment - Noise) would be required of development under the HEU which would further reduce operational stationary source noise levels. Based on these requirements, which are enforced by the City, the potential impact of stationary noise sources from development under the proposed HEU would be **less than significant**.

Mitigation Measure: None required.

Impact NOI-3: Implementation of the HEU would not generate excessive groundborne vibration or groundborne noise levels. (*Less than Significant*)

Future construction activities could occur under the proposed HEU which could have the potential to generate groundborne vibration within the City. Construction activities would occur in a variety of locations throughout the City under the HEU, which may require activities or use of off-road equipment known to generate some degree of vibration. Activities that would potentially generate excessive vibration, such as blasting or impact pile driving would not be expected to occur from housing development under the HEU, as such activities would typically be associated with high-rise development that is not envisioned.

Receptors sensitive to vibration include structures (especially older masonry structures), land uses where people would normally be expected to sleep (sleep disturbance), and equipment (e.g.,

magnetic resonance imaging equipment, high resolution lithographic, optical and electron microscopes). Such vibration-sensitive equipment typically is installed with vibration isolation systems to ensure operational quality control.

Regarding the potential effects of groundborne vibration to people, except for long-term occupational exposure, vibration levels rarely affect human health and because the City’s noise ordinance restricts construction activities to daytime hours, the potential for impacts related to sleep disturbance would be less than significant.

Since specific future projects within the City are unknown at this time, it is conservatively assumed that the construction areas associated with these future projects could be located within 50 feet of sensitive land uses. The primary vibration-generating activities associated with the proposed project would occur during grading, placement of underground utilities, and construction of foundations. shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with housing development construction would be the use of drill rigs for foundation peers, if required.

According to the Caltrans’ *Transportation and Construction Vibration Guidance Manual*, the building damage threshold for historic and some older buildings is 0.25 PPV (in/sec).³ As indicated in **Table 4.11-3** construction activities at distances of 25 feet or further from the nearest existing buildings would be well below the threshold of 0.25 PPV to avoid structural damage to historic and older buildings.

**TABLE 4.11-3
 VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

Equipment	PPV (in/sec) ^a	
	At 25 Feet (Reference)	At 50 feet
Large Bulldozer	0.089	0.35
Auger Drill Rig	0.089	0.35
Loaded Trucks	0.076	0.30
Jackhammer	0.035	0.14

NOTES:

- ^a Vibration amplitudes for construction equipment assume normal propagation conditions and were calculated using the following formula: $PPV (equip) = PPV (ref) \times (25/D)^{1.1}$ where:
 PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
 PPV (ref) = the reference vibration level in in/sec from pp. 31–33 and Table 18 of the Caltrans Vibration Guidance Manual, as well as Table 12-2 of the FTA’s Noise and Vibration Guidance Manual
 D = the distance from the equipment to the receiver

SOURCES: Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020, pp. 29–34, <http://www.dot.ca.gov/hq/env/noise/publications.htm>, accessed on December 21, 2021; FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed December 21, 2021.

³ California Department of Transportation (Caltrans), 2020. *Transportation and Construction Vibration Guidance manual*. April 2020.

In addition, the following City of Mountain View Standard Conditions of Approval (Vibration and Settlement Plan for Projects Adjacent to Historic Structures and Zero-Lot-Line Structures) and (Vibration Best Management Practices Construction Measures) would be required of development under the HEU which would further reduce construction-related vibration.

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

Mitigation Measure: None required.

Impact NOI-4: Transportation increases along roadways under the HEU would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project. (*Less than Significant*)

Vehicular traffic noise increases associated with the proposed HEU were estimated using algorithms found in the FHWA's *Traffic Noise Model Technical Manual* and the estimated traffic volumes provided by the Transportation consultant for this Draft EIR's traffic analysis for the HEU. The results of the vehicular traffic noise modeling effort for the HEU **Table 4.11-4** and are compared to year 2040 baseline conditions without the HEU.

The City has not adopted a specific, quantitative threshold for what constitutes a significant permanent increase in ambient noise levels. The smallest increase in loudness perceptible by the human ear is 3 dBA and increases of 5 dBA or greater are clearly perceptible. (Caltrans, 2013) Therefore, in the absence of quantitative ambient noise level increase thresholds adopted by the city with respect to transportation sources, a substantial increase in ambient noise levels would be defined as either: a 5 dB increase, if after the increase the ambient noise level remains in the range of what would be "normally acceptable" at the sensitive land use where the noise is being received; or a 3 dB increase, if after the increase the ambient noise level exceeds the range of what would be "normally acceptable" at a noise-sensitive land use where the noise is being received. Regardless, as can be seen from the increases in roadside noise presented in Table 4.11-4, the increase in roadside noise levels along all roadways analyzed was less than 1 dBA. Therefore, adoption of the HEU update would have a less than significant impact with respect to operational roadway noise.

**TABLE 4.11-4
 BASELINE AND PROJECTED PEAK HOUR TRAFFIC NOISE LEVELS ALONG STREETS
 HOUSING ELEMENT UPDATE**

Roadway Segment	Baseline Condition (2040)^a	Baseline plus HEU Condition^a	Project Increase over Baseline Condition^a	Significant Increase (Yes or No)?
Ellis Street from U.S. 101 to Middlefield Road	68.9	69.0	0.1	No
North Whisman Road from U.S. 101 to Middlefield Road	65.5	65.6	0.1	No
North Whisman Road from to Middlefield Road to Central Expressway	65.0	65.1	0.1	No
Middlefield Road from Rengstorff Avenue to North Shoreline Boulevard	69.0	69.1	0.1	No
Middlefield Road from North Shoreline Boulevard to Moffett Boulevard	69.9	69.9	0.0	No
Middlefield Road from Moffett Boulevard to North Whisman Road	69.7	69.8	0.1	No
Middlefield Road from North Whisman Road to SR 237	70.0	70.1	0.1	No
Moffett Boulevard from Middlefield Road to Central Expressway	69.4	69.5	0.1	No
El Camino Real from Showers Drive to Rengstorff Avenue	73.2	73.2	0.0	No
El Camino Real from Rengstorff Avenue to South Shoreline Boulevard	70.7	73.7	0.0	No
El Camino Real from South Shoreline Boulevard to Grant Road	74.1	74.2	0.1	No
El Camino Real from Grant Road to SR 85	73.0	73.0	0.0	No
Rengstorff Avenue from El Camino Real to California Street	68.8	68.9	0.1	No
Grant Road from SR 237 to El Camino Real	74.0	74.0	0.0	No
Grant Road from El Camino Real to Cuesta Drive	71.9	72.0	0.1	No
Miramonte Avenue from El Camino Real to Cuesta Drive	66.9	67.1	0.2	No
Miramonte Avenue from Cuesta Drive to Covington Road	64.7	64.9	0.2	No
Cuesta Drive from Miramonte Avenue to Grant Road	70.7	70.8	0.1	No
North Shoreline Boulevard from Charleston Road to U.S. 101	73.1	73.2	0.1	No
North Shoreline Boulevard from U.S. 101 to Middlefield Road	69.1	69.2	0.1	No
North Shoreline Boulevard from Middlefield Road to El Camino Real	67.5	67.6	0.1	No

NOTES:

^a Noise levels were determine using methodology described in FHWA's Traffic Noise Model Technical Manual.

SOURCE: ESA, 2022 (Appendix D)

Mitigation Measure: None required.

Impact NOI-5: Implementation of the HEU would not expose people residing or working in the project area to excessive noise levels due to being located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport. (*Less than Significant*)

Based on a review and comparison of the setting circumstances and housing sites potentially developed as a result of the HEU, it can be concluded that no impacts would result with respect to noise impacts from airport operations. Based on the 2022 noise contours for Moffett Field contained in the City's General Plan and illustrated in **Figure 4.11-1** below, while some of the housing sites of the HEU would be located within the airport influence area, all of the housing sites would be located outside the 60 dBA CNEL noise contour (City of Mountain View, 2012). The Project site is not in the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels from aircraft operations and the impact is less than significant.

Mitigation Measure: None required.

4.11.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to noise and vibration could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more of the cumulative projects or cumulative development projections for 2040 included in the project description and described in Section 4.0.3, *Cumulative Impacts*.

The geographic scope of analysis for cumulative noise and vibration construction impacts encompasses sensitive receptors within approximately 1,000 feet of the project site.⁴ Beyond 1,000 feet, the contributions of noise from other projects would be greatly attenuated by both distance and intervening structures, and their contribution would be expected to be minimal. The geographic scope of analysis for cumulative noise operational impacts is the roadway network system analyzed for the transportation analysis.

⁴ This screening threshold distance was developed based on equations for stationary-source noise attenuation (California Department of Transportation, *Technical Noise Supplement*, September 2013). The analysis also used the combined noise level generated by the typical construction phases for a given project (assuming multiple pieces of equipment) at a distance of 50 feet. Using the attenuation equations, the maximum noise level of 89 dBA for both excavation and finishing would diminish to below 65 dBA at 1,000 feet. A receptor experiencing noise levels of 89 dBA from two adjacent construction sites would experience a cumulative noise level of 91 dBA (the acoustical sum of 89 dBA plus 89 dBA), which would still diminish to below 65 dBA at 1,000 feet. Hence, 1,000 feet is used as the geographic scope.

Moffett Federal Airfield



CNEL (dBs)
65 70 75

2022 Aircraft Noise Contours with AIA

0 3,000 6,000 Feet

This map created by Santa Clara County Planning Office. The GIS data was compiled from various sources. While deemed reliable, the Planning Office assumes no liability.
11/02/2012 - Y:\Mair\AUC\projects\Moffett\NOI_figures\sound_w\AIA.mxd

Figure 5

SOURCE: City of Mountain View, 2012

City of Mountain View Housing Element Update

Figure 4.11-1
2022 Noise Contours for Moffett Federal Airfield

Impact NOI-1.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in generation of a substantial temporary 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. (*Less than Significant*)

Development that could occur with implementation of the HEU and the cumulative projects listed in Table 4.0-2, if constructed contemporaneously, could result in construction noise levels higher than those of development of the HEU alone at some receptor locations.

As discussed in Impact 4.11-1, above, sensitive receptors located within 50 feet of an excavator or other construction equipment producing similar levels of noise could be exposed to a noise level of 82 dBA L_{eq} . The City of Mountain View Noise ordinance exempts construction activities between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday.

Additionally, the City of Mountain View Standard Conditions of Approval would be required of development under the HEU which include Standard Conditions of Approval detailed above in Impact NOI-1. These Standard Conditions of Approval would further reduce construction noise levels from development under the HEU as well as from cumulative projects.

Therefore, while the potential exists for construction projects under the HEU and other foreseeable development to occur simultaneously and in proximity to one another, construction equipment operations would operate within the constraints of the Municipal Code and Standard Conditions of Approval and impacts associated with future construction activities conflicting with local noise standards would be **less than significant**.

Mitigation Measure: None required.

Impact NOI-2.CU: Stationary noise sources from development within the HEU area, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial 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. (*Less than Significant*)

Development that could occur with implementation of the HEU and the cumulative development described in Section 4.0 of this EIR, could result in stationary source noise levels higher than those of development of the HEU alone at some receptor locations.

At the present time, the type, size, and the location of any air handling equipment may be associated with housing developed under the HEU is unknown. As discussed in Impact NOI-2, Section 21.26 of the City's Municipal Code establishes maximum noise levels. In addition, the City of Mountain View Standard Conditions of Approval would be required of development under the HEU and cumulative development projects which would further reduce operational noise levels from stationary sources. Standard Conditions of Approval, detailed above in Impact NOI-2 would all apply. Because these requirements would apply to all past, present, or reasonably foreseeable projects as well as from development with the proposed HEU, the

cumulative impact with respect to stationary noise sources potentially resulting in a substantial 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 would be **less than significant**.

Mitigation Measure: None required.

Impact NOI-3.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of persons to or generation of excessive ground borne vibration levels. (*Less than Significant*)

Development that could occur with implementation of the HEU and the cumulative development described in Section 4.0 of this SEIR could be constructed contemporaneously.

With regard to the potential for a cumulative vibration-related damage impact to occur, because vibration impacts are based on instantaneous PPV levels, worst-case groundborne vibration levels from construction are generally determined by whichever individual piece of equipment generates the highest vibration levels. Unlike the analysis for average noise levels, in which noise levels of multiple pieces of equipment can be combined to generate a maximum combined noise level, instantaneous peak vibration levels do not combine in this way. Vibration from multiple construction sites, even if they are located close to one another, would not combine to raise the maximum PPV. For this reason, the cumulative impact of construction vibration from multiple construction projects located near one another would generally not combine to further increase vibration levels. In essence, vibration effects are highly localized. In addition, the Standard Conditions of Approval, detailed above in Impact NOI-3, would be required of development under the HEU as well as cumulative development projects which would further reduce construction-related vibration.

Vibration impacts resulting from construction of subsequent projects under the HEU would not combine with vibration effects from cumulative projects in the vicinity. Therefore, cumulative groundborne vibration impacts related to potential damage effects and interference with vibration-sensitive equipment would be **less than significant**.

Mitigation Measure: None required.

Impact NOI-4.CU: Transportation activities under the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project and cumulative development. (*Less than Significant*)

Development that could occur with implementation of the HEU and the cumulative development described in Section 4.0 of this SEIR, could result in increased roadside noise levels generated by an increase in roadway traffic.

Vehicular traffic noise increases associated with the proposed HEU inclusive of projected development in the cumulative year 2040 scenario were estimated using algorithms found in the FHWA’s *Traffic Noise Model Technical Manual* and the estimated 2040 traffic volumes provided in this Draft SEIR’s traffic analysis for the HEU. The results of the vehicular traffic noise modeling effort for the HEU were presented in Table 4.11-4, above.

As can be seen from the increases in roadside noise presented in Table 4.11-4, the cumulative increase in roadside noise levels compared to baseline 2021 conditions along all roadways analyzed was less than 1 dBA. Therefore, the cumulative increase in roadside noise levels would be **less than significant**.

Mitigation Measure: None required.

4.11.7 Summary of Noise and Vibration Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact NOI-1: Implementation of the HEU would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less than Significant	None required	-
Impact NOI-2: Stationary noise sources from development within the HEU area would not result in a substantial 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.	Less than Significant	None required	-
Impact NOI-3: Implementation of the HEU would not generate excessive groundborne vibration or groundborne noise levels.	Less than Significant	None required	-
Impact NOI-4: Transportation increases along roadways under the HEU would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project.	Less than Significant	None required	-
Impact NOI-5: Implementation of the HEU would not expose people residing or working in the project area to excessive noise levels due to being located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport.	Less than Significant	None required	-
Impact NOI-1.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in generation of a substantial temporary 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.	Less than Significant	None required	-

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact NOI-2.CU: Stationary noise sources from development within the HEU area, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial 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.	Less than Significant	None required	-
Impact NOI-3.CU: Construction activities associated with implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in exposure of persons to or generation of excessive ground borne vibration levels.	Less than Significant	None required	-
Impact NOI-4.CU: Transportation activities under the HEU, when combined with other past, present, or reasonably foreseeable projects, would not result in a substantial permanent increase in ambient noise levels in the project vicinity above baseline levels without the project and cumulative development.	Less than Significant	None required	-

4.11.8 References

Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020, Table 19, p. 38, <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>, accessed January 20, 2022.

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U.S. EPA, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, March 1974.

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4.12 Population and Housing

4.12.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on population and housing. This section first includes a description of the existing environmental setting as it relates to population and housing, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on population and housing.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to population and housing received during the NOP comment period include concerns related to the City’s jobs-housing balance.

4.12.2 Environmental Setting

Population

The Bay Area is the fifth-largest metropolitan area in the nation and has seen a steady increase in population since 1990. Many cities in the region have experienced significant growth in jobs and population. While these trends have led to a corresponding increase in demand for housing across the region, the regional production of housing has largely not kept pace with job and population growth. Between 2010 and 2020 the City of Mountain View’s population increased by approximately 9.8 percent. Santa Clara County’s overall population increased by 8.6 percent during this period. Overall, the Santa Clara County’s population growth has been consistent with the region, which has seen growth of approximately 8.4 percent over the same decade, and the City of Mountain View’s population growth has been higher than Santa Clara County and the region. **Table 4.12-1** below shows the population trends for 2010-2020 for the City, Santa Clara County, and the region.

**TABLE 4.12-1
 POPULATION TRENDS, 2010-2020**

Population	2010	2020	% Change from 2000-2020
City of Mountain View	74,066	81,302	+ 9.8%
Santa Clara County	1,781,642	1,934,171	+ 8.6%
Bay Area Region ^a	7,150,739	7,748,930	+ 8.4%

NOTES:

^a The nine-county Bay Area Region includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

SOURCE: California Department of Finance, E-4 Series (CDOF, 2021a).

Housing

Trends for the change in the number of housing units mirror those for population described above. The number of housing units increased in the City between 2010 and 2020, but at a much higher rate than the region. Santa Clara County as a whole also showed growth in the number of households, at a rate higher the Bay Area Region, but less than the City. Average household size increased in the City over the decade, similar to Santa Clara County and the region. **Table 4.12-2** below shows the housing trends for 2010-2020 for the City, Santa Clara County, and the region.

**TABLE 4.12-2
 HOUSING TRENDS, 2010-2020**

	2010	2020	% Change from 2010-2020
Housing Units ^a			
City of Mountain View	33,881	37,820	+ 11.6%
Santa Clara County	631,920	674,558	+ 6.7%
Bay Area Region ^b	2,783,991	2,924,264	+ 5.0%
Average Household Size			
City of Mountain View	2.31	2.37	
Santa Clara County	2.90	2.98	
Bay Area Region ^b	2.65	2.70	

NOTES:

^a "Housing units" are all housing (occupied and unoccupied housing units).

^b The nine-county Bay Area Region includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

SOURCE: California Department of Finance, E-4 and E-5 Series (CDOF 2021a; 2021b); City of Mountain View, 2022.

Overall Relationship of Jobs and Housing

Jobs/housing balance evolves over time and reflects the role and location of particular areas within a larger regional context. Table 3-2 in Chapter 3, *Project Description*, shows 101,956 jobs in the City in 2020, and 133,000 jobs projected in 2040. In 2020, the City had approximately 47,903 employed residents, resulting in a ratio of 2.13 jobs for every employed resident (U.S. Census Bureau, 2020). The total numbers of jobs and employed residents in 2020 the City indicates that the jobs-housing ratio for the City is imbalanced, and this trend is expected to continue through 2040.

4.12.3 Regulatory Setting

Federal

Fair Housing Act

The federal Fair Housing Act (42 U.S.C. 3601 et seq.), enacted in 1968, prohibits discrimination by direct providers of housing, such as landlords and real estate companies as well as other entities, such as municipalities, banks or other lending institutions and homeowners' insurance companies whose discriminatory practices make housing unavailable to persons because of race or color, religion, sex, national origin, familial status, or disability.

State

California Housing Element Requirements

California law (Government Code Section 65580, et seq.) requires cities and counties to include a Housing Element as a part of their General Plans to address housing conditions and needs in the community. Housing Elements are prepared approximately every eight years, following timetables set forth in the law. The Housing Element must identify and analyze existing and projected housing needs and “make adequate provision for the existing and projected needs of all economic segments of the community,” among other requirements. The City adopted its current Housing Element in 2014 (City of Mountain View, 2014).

State law mandates that all cities and counties zone land appropriately to accommodate the increasing needs of regional population growth. Regional housing needs are determined by the California Department of Housing and Community Development (HCD).

Senate Bill 330

On October 9, 2019, Gov. Gavin Newsom signed the Housing Crisis Act of 2019 (HCA) into law, commonly known as Senate Bill (SB) 330 (Chapter 654, Statutes of 2019) to respond to the California housing crisis. On September 16, 2021, Gov. Newsom signed SB 8 (Chapter 161, Statutes of 2021), which is an extension of the HCA. The HCA aims to increase residential unit development, protect existing housing inventory, and expedite permit processing. This new law makes a number of modifications to existing legislation, such as the Permit Streamlining Act and the Housing Accountability Act.

SB 330 sets a temporary 5-year prohibition of residential density reduction associated with housing development projects from January 1, 2020, to January 1, 2025. SB 8 extended the temporary prohibition for an additional 5-year period, concluding on January 1, 2030. For example, during this temporary prohibition, a residential duplex cannot be demolished and replaced with a single-unit dwelling as this would be a net loss of one unit. In addition, existing units that are defined as protected must be replaced, and displaced tenants must be provided relocation benefits.

Regional

Association of Bay Area Governments Area Governments and Regional Housing Needs Allocation

The Association of Bay Area Governments (ABAG) is the comprehensive regional planning agency and council of governments for the nine-county San Francisco Bay Area Region. Its members include the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma counties and 101 cities and towns of the San Francisco Bay region.

ABAG determines the distribution of affordable housing in the region through its Regional Housing Needs Allocation process. For the period from 2023 to 2031, HCD has identified a need of more than 441,000 housing units in the Bay Area — more than double the amount from the last eight-year cycle (187,000 units between 2015 and 2023). Housing needs are distributed for very low income, low income, moderate income, and above moderate households (ABAG, 2021).

As discussed in Chapter 3, *Project Description*, jurisdictions in the Bay Area are currently updating their housing elements for the 6th Cycle, representing the eight-year planning period from 2023 to 2031. The City’s Regional Housing Needs Allocation (RHNA) by income group is shown in **Table 4.12-3**, below. The City’s HEU must plan for housing that meets this RHNA, plus an appropriate buffer.

**TABLE 4.12-3
 MOUNTAIN VIEW REGIONAL HOUSING NEEDS ALLOCATION
 6TH HOUSING ELEMENT CYCLE (2023-2031)**

	Very Low Income Units (0-50% AMI)	Low Income Units (51-80% AMI)	Moderate Income Units (81-120% AMI)	Above Mod Units (>120% AMI)	Total New Units
6 th Cycle RHNA	2,773	1,597	1,885	4,880	11,135
% of Total	25%	14%	17%	44%	100%

SOURCE: ABAG, Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031 adopted December 2021.

Plan Bay Area 2050

SB 375 requires all metropolitan regions in California to complete a sustainable communities strategy (SCS) as part of a regional transportation plan. In the Bay Area, the MTC and ABAG are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing to meet GHG reduction targets set by the California Air Resources Board.

Plan Bay Area 2050, adopted in October 2021, serves as the SCS for the Bay Area, in accordance with SB 375.¹ *Plan Bay Area 2050 is comprised of 35 strategies across the elements of housing, the economy, transportation, and the environment.* A core household and employment growth strategy of Plan Bay Area is “focused growth” in existing communities along the existing transportation network. Key to implementing this focused growth strategy are Priority Development Areas (PDAs) and Transit-Rich Areas (TRAs), as recommended and approved by local governments. As defined by the plan, PDAs are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. Plan Bay Area also recommends increasing non-auto travel mode share and reducing vehicle miles traveled per capita and per employee by promoting transit-oriented development, transit improvements, and active transportation modes such as walking and bicycling.

Prior to *Plan Bay Area 2050*, Plan Bay Area 2040, adopted in 2017, was the most recent regional transportation plan and sustainable communities strategy for the Bay Area region. Plan Bay Area 2050 updates Plan Bay Area 2040 and is consistent with the current Regional Housing Needs Allocation cycle. However, since Plan Bay Area 2050 was adopted in late 2021, Plan Bay Area 2040 continues to serve as the basis for regional and county-wide transportation models until the models are updated. Updates to the models are anticipated within the next several years.

¹ Association of Bay Area Governments, *Plan Bay Area 2050*, Final, adopted October 21, 2021.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Land Use and Design Element of the General Plan includes the following policies related to population and housing (City of Mountain View, 2012).

Policy LUD 3.2: Mix of Land Uses. Encourage a mix of land uses, housing types, retail and public amenities, and public neighborhood open spaces accessible to the community.

Policy LUD 3.5: Diversity. Encourage residential developments serving a range of diverse households and incomes.

Policy LUD 6.2: Equitable location of amenities. Pursue equitable distribution of community amenities, public facilities and services within walking distance of residential neighborhoods.

City of Mountain View Below-Market-Rate Housing Program

The City of Mountain View Municipal Code includes a Below-Market-Rate (BMR) Housing Program (Chapter 36, Article XIV, Division 2). The BMR Housing Program requires developers of new residential and applicable condominium conversions projects to make at least 15 percent of the total number of dwelling units within the development BMR units and/or pay a fee in lieu thereof. Rowhouses and townhouses in residential ownership developments are subject to a 25 percent on-site BMR requirement

4.12.4 Significance Criteria

The thresholds used to determine the significance of impacts related to population and housing are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- 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).
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Approach to Analysis

The proposed project would update the City's Housing Element and plan for development of additional housing. Importantly, the first significance threshold above requires an evaluation of whether the project would induce "unplanned growth," which it would not, since the housing element itself is a plan. Similarly, the RHNA Plan and the housing requirements contained therein is also a plan. It thus follows that the HEU's conformance with those plans would avoid a significant environmental impact. Nonetheless, the analysis informs consideration of whether implementation of the HEU would induce substantial unplanned population growth, and is

supplemented with a consideration of whether the planned development of new housing would displace existing people or housing, necessitating construction of replacement housing.

4.12.5 Impacts of the Project

Impact POP-1: Implementation of the HEU would not induce substantial unplanned population growth in an area, either directly or indirectly. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units in the City and a resulting increase in the City's population. While no specific development proposals are directly entitled through the HEU, the HEU would plan for development of up to approximately 15,000 new housing units in the City to 2031, which is equivalent to the 11,135 units assigned to the City through the RHNA process plus a buffer. In doing so, the Housing Element would be updated to identify specific sites for multi-family housing in the City shown in Figure 3-3. If all sites were developed at the planned densities to accommodate the total of up to approximately 15,000 new units to 2031, the population of the City would increase by approximately 30,000 persons. In addition, it's assumed that approximately 4,100 units would be enabled by changes in development capacity via rezoning over the long term, beyond 2031. The actual pace of development will depend on market conditions, property owner interest, and other factors.

It is important to note that the identification of housing sites in the City's Housing Element does not mean someone necessarily will develop housing on those sites at the planned unit count or level of affordability. Although the City must plan for housing development, it does not directly build, or require to be built, any housing. Instead, the identification of housing sites is intended to plan for and encourage housing, and its development by property owners and developers is largely dependent on market forces and (in the case of affordable housing) available subsidies.

Regardless, development under the HEU would conform to the City's revised zoning allowances, in response to the ABAG's RHNA allocation, which requires the City to identify sufficient housing sites to accommodate the City's RHNA allocation, plus a buffer of additional units at appropriate densities. By definition, such development would be "planned" rather than unplanned, and would conform to the City's zoning code and General Plan as amended, as well as the ABAG RHNA Plan.

Housing development that could occur as a result of the HEU's implementation would require installation of infrastructure such as access roads and utilities. However, these infrastructure improvements would be designed to serve only the planned housing, and would not enable growth or facilitate unplanned growth beyond that housing.

Based upon these considerations, implementation of the HEU would not directly or indirectly induce unplanned population growth to the area, and the impact would therefore be **less than significant**.

Mitigation: None required.

Impact POP-2: Implementation of the HEU would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (*Less than Significant*)

Much of the developable area of the City is already developed, and nearly all of the parcels identified for rezoning as part of the HEU are already developed with some sort of use, be it residential or commercial uses. Accordingly, in order to develop additional residential uses on those parcels at the densities greater than that which is currently present, it stands to reason that the existing structures on the site would need to be removed and the higher-intensity residential use developed in its place. For example, a single-family parcel could be combined with neighboring commercial parcels and redeveloped into a multi-family residential project. Under such a scenario, the existing residents would vacate their properties, though such a circumstance would be voluntary through the sale of their properties to the prospective developer(s). Regardless, residential use on the site would be perpetuated, though at a higher density, and there would be a net increase in available housing on the site. Therefore, the construction of replacement housing elsewhere would not be required. None of the proposed HEU housing site inventory sites (other than pipeline projects) include existing residential units. Projects proposed on sites with existing residential uses would be required to comply with tenant relocation and replacement requirements under SB 330. As such, the implementation of the HEU would not displace substantial numbers of existing people or housing, and construction of replacement housing elsewhere would not be required. The impact would be **less than significant**.

Mitigation: None required.

4.12.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to population and housing could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on population and housing is the Bay Area Region. The cumulative scenario is represented by the HEU and Plan Bay Area 2040, which estimate planned housing and population growth within the City and Bay Area region. For the City, the HEU would increase the currently allowed cumulative growth in the City by about 4,100 dwelling units. For the Bay Area region, Plan Bay Area 2040 anticipates the addition of 544,735 housing units between 2020 and 2040 (ABAG, 2018).

Impact POP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on population and housing. (*Less than Significant*)

As discussed under the analysis for Impacts POP-1 and POP-2, implementation of the HEU would have a less than significant impact with respect to unplanned population growth or

residential displacement. Approximately 4,100 units would be enabled by changes in development capacity via rezoning. This would be in addition to more than 23,000 net new units that could be allowed under the cumulative growth of the City’s adopted General Plan, zoning, and Precise Plans. As such, the HEU’s contribution to cumulative population growth as a result of rezoning would be approximately 8,200 persons. As discussed above, the HEU represents a worst-case scenario by which population and housing effects in the City are evaluated. The potential population and housing growth provided for in the HEU conforms to the ABAG RHNA Plan. Under the HEU, if growth were to occur at the maximum densities specified, that growth would conform to the City’s zoning code and General Plan, as amended, as well as the ABAG RHNA Plan, and would thus constitute “planned growth.”

Other jurisdictions in the Bay Area are also updating their housing elements in response to the RHNA Plan. Updates to those housing elements would also conform to the housing unit and buffer requirements of the RHNA Plan, and those jurisdictions would also update and amend their General Plans and zoning codes to meet the requirements of the RHNA Plan. Similar to the City’s planned growth as described above, growth in these other jurisdictions would therefore be similarly “planned” and would not contribute to a cumulatively considerable effect as relates to unplanned growth. Accordingly, implementation of the HEU would not be cumulatively considerable, and the impact would therefore be **less than significant**.

Mitigation: None required.

4.12.7 Summary of Population and Housing Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact POP-1: Implementation of the HEU would not induce substantial unplanned population growth in an area, either directly or indirectly.	Less than Significant	None required	-
Impact POP-2: Implementation of the HEU would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	Less than Significant	None required	-
Impact POP-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on population and housing.	Less than Significant	None required	-

4.12.8 References

- Association of Bay Area Governments (ABAG), 2021. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031*, adopted December 2021.
- ABAG, 2018. *Plan Bay Area Projections 2040, A Companion to Plan Bay Area 2040*, November 2018.
- California Department of Finance (CDOF), 2021a, *E-4 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*, May 2021.
- CDOF, 2021b. *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2021*, May 2021.
- City of Mountain View, 2012. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021.
- City of Mountain View, 2014. *City of Mountain View 2015-2023 Housing Element*, adopted October 14, 2014.
- U.S. Census Bureau, 2020. American Community Survey, *Table DP03 Selected Economic Characteristics, 2020: ACS 5-Year Estimates Data Profiles*.

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4.13 Public Services and Recreation

4.13.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on public services and recreation. This section first includes a description of the existing environmental setting as it relates to public services and recreation, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on public services and recreation.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to public services and recreation received during the NOP comment period include concerns related to school impact fees and school construction costs.

4.13.2 Environmental Setting

4.13.2.1 Fire Protection and Emergency Response

Mountain View Fire Department

The Mountain View Fire Department (MVFD) exists to save lives and property, protect the environment, and minimize the risk of fire and natural disaster. The MVFD has a fire prevention division and environmental division which aim to prevent fires and injuries and limit the effects of fires and accidents. The Environmental Safety Section of the Fire Department implements State mandated water pollution control programs to minimize pollutant discharges into Mountain View creeks and the Bay. The MVFD has a multi-family inspection program to ensure proper maintenance of multi-family housing. MVFD firefighters are often the first responders and provide valuable services to the City including fire suppression, emergency medical treatment, technical rescue services, and response to hazardous materials releases (City of Mountain View, 2022a).

MVFD currently maintains 5 fire stations throughout the City. The MVFD fleet includes seven engines, one rescue, one Haz Mat vehicle, and one truck (City of Mountain View, 2022a). Station 1, located at 251 South Shoreline Boulevard, has an engine company, ladder truck company, rescue company, and a battalion chief. Station 2, located at 160 Cuesta Drive, has two engine companies. Station 3, located at 301 North Rengstorff Avenue, has two engine companies, one of which is a California Office of Emergency Services (Cal OES) company. Station 4, located at 229 North Whisman Road, has three engine companies (two of which are reserves), one reserve battalion chief, and one utility company. Station 5, located at 2195 North Shoreline Boulevard, has an engine company, hazmat company, truck company (reserve), and a utility terrain vehicle. All the stations have 3 staff per shift, except for Station 1 which has 9 staff per shift (MVFD, 2021).

In 2021-2022, the MVFD had a total of 10,406 unit responses, which included 489 unit responses for fire-related call and 7,288 unit responses for rescue and EMS-related calls (MVFD, 2022).

The MVFD regularly achieves its goal of responding to each emergency call within six minutes (City of Mountain View, 2021).

The MVFD provides paramedic level services on each of its engines, truck, and rescue. The Emergency Operations Center (EOC) is the central command and control facility responsible for carrying out the emergency preparedness and emergency management as well as disaster management functions at a strategic level in an emergency situation. The common functions of the EOC is to collect, gather and analyze data; make decisions that protect life and property, maintain continuity of the organization, within the scope of applicable laws; and disseminate those decisions to all concerned departments, residents, and agencies (City of Mountain View, 2022a).

4.13.2.2 Police Protection

Mountain View Police Department

The Mountain View Police Department (MVPD) provides police services in the City of Mountain View. Services include crime suppression, investigation, traffic enforcement, youth services, community education, neighborhood and event services, and a K-9 patrol. In 2020, the MVFD employed 181 full (143 full-time), regular, and limited period positions to serve the City population of 82,739. The MVFD has 1 police chief and 1 deputy police chief; the rest of the staffing falls into the categories of administration, field operations, special operations, or public safety support services. In 2020, the MVPD had 3 K9 teams (MVPD, 2020). There is one police station in the City, located at 1000 Villa Street (City of Mountain View, 2022b).

Mountain View is divided into four geographic beats and although beats differ in size, the MVPD's goal is to respond to high priority calls in less than four minutes (City of Mountain View, 2021). In 2020, the MPD had 27,127 calls for service, including dispatched and self-initiated responses. In 2020, there were 1,126 emergency calls and response time to emergency and priority 1 events (first unit dispatched to first unit arriving) was 4 minutes or less 62.8 percent of the time (707 out of 1,126 calls) (MVPD, 2020).

4.13.2.3 Public Schools

The City is served by the Mountain View Whisman School District (MVWSD), the Los Altos School District (LASD) and the Mountain View Los Altos Union High School District (MVLA). Students attending preschool through Grade 8 living in Mountain View attend schools in the MVWSD and LASD. Students in Grade 9 or higher attend Mountain View High School, Alta Vista High School, or Los Altos high School in the MVLA.

Mountain View Whisman School District

The MVWSD, is located in Mountain View and serves a diverse student population in preschool through eighth grade. The MVWSD operates one preschool, nine K-5 elementary schools, two 6-8 middle schools in the City. As of February 2022, MVWSD school facilities had a total enrollment of 4,526 students. As of September 2020 MVWSD employed 26 management staff (46 FTE), 310 teachers (297.65 FTE), and 302 classified staff (222.96 FTE) (MVWSD, 2022a).

As authorized by California Government Code Sections 65995 and 65996, MVWSD collects school impact fees from developers of new residential building space. The impact fee revenue is used together with other MVWSD funds (e.g., State grants, general obligation bonds) to complete capital improvements. The amount of the fee (currently \$3.19 per square foot of new residential space) is established through MVWSD Developer Fee Justification Study (MVWSD, 2022b).

Los Altos School District

The LASD operates nine schools serving the communities of Los Altos, Mountain View, Palo Alto, Los Altos Hills and unincorporated areas. There are seven elementary (K to 6th Grade) and two intermediate schools (grades 7 to 8). District-wide enrollment during the 2021 to 2022 school year was 3,576 students (CDE, 2022c). The only LASD school located in Mountain View is Springer Elementary. Total enrollment at Springer Elementary during the 2021 to 2022 school year was 346 students in grades K-6 (CDE, 2022d).

As authorized by California Government Code Sections 65995 and 65996, MVWSD collects school impact fees from developers of new residential building space. The impact fee revenue is used together with other LASD funds (e.g., State grants, general obligation bonds) to complete capital improvements. The current fee is \$3.19 per square foot of assessable space for residential uses (LASD, 2022).

Mountain View Los Altos Union High School District

The MVLA serves the communities of Mountain View, Los Altos and Los Altos Hills. The MVLA district is comprised of two comprehensive high schools, an alternative high school, an adult education center, the Freestyle Academy for Arts & Technology, and Middle College. In 2020-2021 the MVLA had a total enrollment of 4,563 students (CDE, 2022a). The average student to teacher ratio at MVLA is 20:1 (MVLA, 2022a).

As authorized by California Government Code Sections 65995 and 65996, MVLA collects school impact fees from developers of new residential building space. The impact fee revenue is used together with other MVLA funds (e.g., State grants, general obligation bonds) to complete capital improvements. The amount of the fee (currently \$1.36 per square foot of new residential space) is established through MVLA Developer Fee Justification Study (MVLA, 2020).

4.13.2.4 Parks and Recreation

The City of Mountain View, Community Services Department manages recreation programs and services in the City. The Community Services Department contains five divisions including forestry and roadway landscape, parks and open space, performing arts, recreation, and shoreline. The City of Mountain View contains mini-parks, neighborhood parks, community parks, and a regional park.

Parks and Open Space

The City's General Plan (2021) identifies four general park types: mini parks, neighborhood parks, community parks, and regional parks/open space. The City of Mountain View Parks and

Open Space Plan (2014) provided the following definitions characterizing these spaces (City of Mountain View, 2014):

- A *mini park* is a specialized facility that serves a concentrated or limited population or specific groups such as children or senior citizens. They are typically up to 3 acres and serve residents within one-half mile.
- A *neighborhood park* is a higher-intensity recreation area providing play areas as well as open turf for athletics. They are typically 3 to 15 acres and serve residents within one mile.
- A *community park and/or recreational facility* is an area of diverse environmental quality. They may include areas suited for intense recreational facilities such as athletic complexes and large swimming pools. May be an area of natural quality for outdoor recreation such as walking, viewing, sitting, and picnicking. May be any combination of the above, depending upon site suitability and community need. They are typically 15 to 50 acres and serve the entire City.
- A *regional park* is an area of natural or ornamental quality for outdoor recreation such as picnicking, boating, fishing, swimming, camping, and trail uses; may include play areas. They are typically over 50 acres and serve a population beyond the City limits.

Existing classifications and acreages of City-owned parks are shown in **Table 4.13-1** below.

**TABLE 4.13-1
 EXISTING CITY-OWNED PARKS**

Park type	Number of Parks	Open Space Acres
Mini Parks	18	14.25
Neighborhood Parks – School Sites	13	105.18
Neighborhood Parks – City Owned	5	27.44
Community Parks	2	49.48
Regional Parks and Open Space (including Stevens Creek Trail)	1	796.72
Total City Parks	39	993.07

SOURCE: City of Mountain View Parks and Open Space Plan (City of Mountain View, 2014)

School sites are an important part of the City’s park system as many residents rely on nearby schools to provide neighborhood recreational resources. Joint-use agreements between the City and MVWSD allow for shared public access to school grounds and facilities. These school sites, typically five acres or more, provide most of the city’s facilities for sports such as baseball, softball, and soccer. Mountain View’s long-standing policy supporting cooperative agreements with the school district allows joint use of 12 school park sites for recreation outside of school hours. These sites include all active and inactive school sites in the district in addition to one school in the MVLA District (City of Mountain View, 2021). School sites make up approximately 79 percent of the City’s neighborhood parks.

Shoreline at Mountain View regional Park is a 753-acre open space and wildlife preserve consisting of wetlands, marshes, upland habitats, a golf course, sailing lake. The historic Rengstorff House,

and two adjacent open space areas, Crittenden Hill and Vista Slope. The 2014 Mountain View Parks and Open Space Plan defined open space as parkland that does not have enclosed, single-use recreational facilities or parking lots built over the land (City of Mountain View, 2014).

Trails

Urban trails are defined as continuous open space corridors for walking, biking, hiking, offering scenic views, wildlife habitat, commute alternatives, and connections to neighborhoods, transit centers, and employment areas. The City's multi-use trails connect neighborhoods and parks throughout the community and offer recreational opportunities to the City. There are five major trail systems addressed in the City of Mountain View Parks and Open Space Plan: Stevens Creek, Hetch Hetchy, Permanente Creek, Bay regional, and Whisman Transit-Oriented Development (TOD) Trail (City of Mountain View, 2014).

The Stevens Creek Trail is a 5.14 mile (completed portion only), north-south trail that is owned by the City of Mountain View, Santa Clara Valley Water District, and PG&E. As of 2014, the trail is completed between Shoreline at Mountain View and Dale Avenue/Heatherstone Way. The Hetch Hetchy Trail is a 0.4 mile, east-west trail that is owned by the City of Mountain View. The trail connects the Ellis-Whisman-Middlefield industrial area to Stevens Creek Trail. The Bay Trail is a 2.25 mile (completed portion only), north-south trail that is owned by the City of Mountain View. The completed portion connects through Shoreline at Mountain View to the Sunnyvale Baylands. The Permanente Creek is a 1.17 mile, north-south trail that is owned by the Santa Clara Valley Water District. The paved trail exists between Shoreline at Mountain View and Rock Street. In 2013, an extension to Rock Street, including a bridge over Highway 101 and tunnel under Old Middlefield Way was completed. The Whisman Transit-Oriented Development Trail is a 0.3 mile, north-south trail owned by private property owners. The trail provides off-street pedestrian/bicycle pathway between North Whisman Road and Ellis Street (City of Mountain View, 2014).

Communities Facilities

Mountain View's community facilities provide residents with social, recreational, and educational opportunities. Major community facilities include the Library, Mountain View Center for Performing arts, Senior Center, Child Care Center, Community Center, two swimming pools, and a tennis complex. These facilities exist in the Downtown Civic Center area and in the two community parks, Cuesta Community Park and Rengstorff Community Park. Shoreline at Mountain View Regional Park has a golf course (City of Mountain View, 2021).

4.13.3 Regulatory Setting

Federal

National Fire Protection Association 1710

National Fire Protection Association (NFPA) 1710 is the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. NFPA developed NFPA 1710 as an industry standard for the deployment of fire suppression operations to ensure safe and effective

fire service operations. The Standard stipulates that the first fire engine should arrive to 90 percent of emergency calls within a range of 6:15 and 6:45 minutes. It is recognized that the NFPA 1710 Standard is the optimal nationally.

State

California Fire Code

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, and fire safety during construction and demolition.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations Title 8 Sections 1270 “Fire Prevention” and 6773 “Fire Protection and Fire Equipment” the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all fire fighting and emergency medical equipment.

Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities, and restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional school facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities. Indirect impacts related to school attendance or construction of new facilities must still be considered under CEQA (e.g., indirect impacts on traffic, air quality, noise).

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The dedication of land or in-lieu fees may be required for land or condominium subdivisions. Land dedicated and fees collected pursuant to the Quimby Act may only be used for developing new, or rehabilitating existing, park or recreational facilities. The

Quimby Act effectively preserves open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Land Use and Design, Mobility, Infrastructure and Conservation, Parks, Open Space and Community Facilities, and Public Safety Elements of the General Plan includes the following policies related to public services and recreation (City of Mountain View, 2021).

Goal LUD-3: A diverse, balanced and flexible mix of land uses that supports a strong economy, complete neighborhoods, transit use and community health.

Policy 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.

Policy LUD-3.2: Mix of land uses. Encourage a mix of land uses, housing types, retail and public amenities and public neighborhood open spaces accessible to the community.

Goal LUD-5: Pedestrian-accessible village centers that serve surrounding neighborhoods.

Policy LUD-5.3: Community gathering. Encourage community gathering destinations such as plazas, open space or community facilities within village centers.

Policy LUD-5.4: Connections. Encourage pedestrian, bicycling and public transit connections and amenities between village centers and surrounding neighborhoods.

Goal LUD-6: Distinctive neighborhoods that preserve and enhance the quality of life for residents.

Policy LUD-6.5: Pedestrian and bicycling improvements. Support pedestrian and bicycling improvements and connections between neighborhoods.

Goal LUD-8: A network of pedestrian-oriented, sustainable and public spaces.

Policy LUD-8.2: Streets friendly to bicyclists and pedestrians. Encourage a network of streets friendly to bicyclists and pedestrians that create a safe and comfortable environment and include convenient amenities and features.

Policy LUD-8.3: Enhanced publicly-accessible bicycle and pedestrian connections. Encourage new and existing developments to enhance publicly-accessible bicycle, pedestrian and transit connections.

Goal LUD-16: A diverse area of complementary land uses and open space resources.

Policy LUD-16.1: Protected open space. Protect and enhance open space and habitat in North Bayshore.

Policy LUD-16.6: Open space amenities. Encourage development to include open space amenities, plazas and parks that are accessible to the surrounding transit, bicycle and pedestrian network.

Goal MOB-3: A safe and comfortable pedestrian network for people of all ages and abilities at all times.

Policy MOB-3.2: Pedestrian connections. Increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers and other destinations throughout the city.

Goal MOB-4: A comprehensive and well-used bicycle network that comfortably accommodates bicyclists of all ages and skill levels.

Policy MOB-4.1: Bicycle network. Improve facilities and eliminate gaps along the bicycle network to connect destinations across the city.

Goal MOB-6: Safe and convenient pedestrian and bicycling access to schools for all children.

Policy MOB-6.1: Safe routes to schools. Promote Safe routes to Schools programs for all schools serving the city

Policy MOB-6.2: Prioritizing projects. Ensure that bicycle and pedestrian safety improvements include projects to enhance safe accessibility to schools

Policy MOB-6.3: Connections to trails. Connect schools to the citywide trail systems

Goal INC-16: Rich and biologically diverse ecological resources which are protected and enhances.

Policy INC-16.1: Natural areas. Work with regional agencies to protect and enhance natural areas.

Policy INC-16.2: Shoreline at Mountain View. Manage Shoreline at Mountain View Regional Park to balance the needs of recreational, open space, habitat, commercial and other uses.

Goal POS-1: An expanded and enhanced park and open space system.

Policy POS-1.1: Additional parkland. Expand park and open space resources to meet current City standards for open space acreage and population in each neighborhood.

Policy POS-1.2: Recreation facilities in new residential developments. Require new development to provide park and recreation facilities.

Goal POS-2: Parks and public facilities equitably distributed throughout the community and accessible to residents and employees.

Policy POS-2.1: Distribution of parks. Give priority for park acquisition to the Planning Areas identified in the Parks and Open Space Plan.

Policy POS-2.2: Connectivity and transit access. Improve connectivity and transit accessibility to parks.

Policy 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 POS-2.4: Access to Bay and natural areas. Promote safe access to San Francisco Bay, creeks, scenic features and other natural resources in the city and surrounding region.

Policy POS-2.5: Schools. Pursue strategies for preserving its park and open space areas if a school site is declared surplus by the school district.

Policy POS-2.6: Diverse park amenities. Design parks to address a range of activities for diverse populations.

Goal POS-3: Open space areas with natural characteristics that are protected and sustained.

Policy POS-3.1: Preservation of natural areas. Preserve natural areas, creeks and Shoreline at Mountain View Regional Park primarily for low-intensity uses. In special circumstances more active uses may be permitted if the overall natural character of the larger area is retained.

Goal POS-4: Parks and public facilities that are well designed and integrated with the surrounding neighborhood.

Policy POS-4.1: Community involvement. Involve and empower the community in planning and carrying out open space programs.

Goal POS-5: Cooperation between the City and local school districts to meet shared open space, recreation and education needs.

Policy POS-5.1: Cooperation with school districts. Continue cooperative arrangements with school districts to use open space and facilities at schools for public parks, playgrounds and recreation programs and establish new arrangements.

Policy POS-5.2: Schools and open space. Collaborate with the school district on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds.

Policy POS-5.3: School facilities. Ensure school facilities are constructed to serve community needs to the extent allowed by state law.

Policy POS-5.4: School facility needs. Collaborate with local school districts on their facility needs and provide information on development and growth trends.

Goal POS-6: An integrated system of multi-use trails connecting to key local and regional destinations and amenities.

Policy 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.

Goal PSA-1: A high level of community safety with police, fire and emergency response services that meet or exceed industry accepted service standards.

Policy PSA-1.1: Adequate staffing. Maintain adequate police and fire staffing, performance levels and facilities to serve the needs of the community.

Policy PSA-1.2: Design for safety. Support and promote crime prevention and fire safety strategies in the design of new developments.

Goal PSA-2: A total commitment to reducing criminal activity and instilling a feeling of safety and security in the community.

Policy PSA-2.1: Community policing. Provide superior community-oriented police services.

Policy PSA-2.2: Sense of safety. Ensure a sense of safety throughout the community.

Policy PSA-2.3: Service and effectiveness. Explore ways to improve service delivery and police effectiveness.

Policy PSA-2.5: Regional partnerships. Participate in regional partnerships to reduce crime and respond to emergencies.

Policy PSA-2.7: Police service levels and facilities. Ensure Mountain View Police Department service levels and facilities meet demands from new growth and development.

Goal PSA-3: A community protected from fire, hazardous materials and environmental combination.

Policy PSA-3.1: Minimized losses. Minimize property damage, injuries and loss of life from fire.

Policy 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.

Policy PSA-3.3: Development review. Carry out development review procedures that encourage effective identification and remediation of contamination and protection of public and environmental health and safety.

Policy 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.

Policy PSA-3.5: Peak water supply. Ensure sufficient peak-load water supply to address fire and emergency response needs when approving new development.

Goal PSA-4: A well-prepared community that has developed plans to minimize risks from environmental and human-induced disasters.

Policy PSA-4.1: Emergency response plan. Maintain and update the City's emergency response plans.

2014 Parks and Open Space Plan

The City of Mountain View's Parks and Open Space Plan was adopted in 1992. The 2014 version of the Plan represents the sixth update since its first adoption. The Plan represents a review of open space resources within the City of Mountain View and offers a long-range vision intended to guide decisions made to advance park and open space resources. The Plan provides an evaluation of open space resources in the City and its neighborhoods and prioritizes recommendations for the acquisition, improvement, and preservation of parks and open space. The Plan also establishes a City goal of 3.00 acres of open space per 1,000 residents.

Mountain View Municipal Code

Park Land Dedication or Fees in Lieu Thereof (Chapter 41.3 and 41.4). The City's Park Land Dedication or Fees in Lieu Thereof allow developers to dedicate land, pay a fee in lieu of, or both, at the option of the City for park or recreational purposes. The Fees collected pursuant to this chapter are to be used only for the purpose of providing park or recreational facilities to serve the subdivision from which fees are collected. Fees collected shall be used to purchase land, buy equipment, construct improvements, rehabilitate a proposed or existing mini-park, community park, neighborhood park, recreational facility, Stevens Creek trail, community gardening facility or combination thereof serving said subdivision. The fee so required shall be based on the fair market value of the land that otherwise would have been required for dedication.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (as of October 25, 2021). For all construction activities, the City has standard conditions relating to public services and recreation, as summarized below.

School Impact Fee

Project is subject to school impact fees. To obtain information, fee estimates, and procedures, please contact the following local school districts: Mountain View Los Altos High School District at www.mvla.net or 650-940-4650; and Mountain View Whisman School District at www.mvwsd.org or 650-526-3500; or Los Altos Elementary School District at www.lasdschools.org or 650-947-1150.

Park Land Dedication Fee

Prior to the issuance of any building permits and prior to the approval of the parcel or final map, the applicant shall pay the Park Land Dedication Fee (approximately \$20,000 to \$40,000 per unit) for each new residential unit in accordance with Chapter 41 of the City Code prior to the issuance of the building permit. No credit against the Park Land Dedication Fee will be allowed for private open space and recreational facilities. Provide the most current appraisal or escrow closing statement of the property with the following information to assist the City in determining the current market value of the land: (1) a brief description of the existing use of the property; (2) square footage of the lot; and (3) size and type of each building located on the property at the time the property was acquired.

4.13.4 Significance Criteria

The thresholds used to determine the significance of impacts related to public services are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- 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:
 - i) Fire protection;
 - ii) Police protection;
 - iii) Schools;
 - iv) Parks; or
 - v) Other public facilities.
- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Approach to Analysis

Potential direct impacts to public services are discussed relative to potential substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, as directed by the Significance Thresholds defined in Appendix G of the *CEQA Guidelines*. Similarly, potential direct impacts to recreation are discussed related to the accelerated substantial physical deterioration of recreational facilities and the construction/expansion of recreational facilities. The cumulative analysis considers potential public services and recreation impacts of the HEU's implementation combined with cumulative development in the vicinity.

Implementation of the HEU could have a significant impact on public services if: (1) it would require the construction of new or physically altered governmental facilities in order to maintain acceptable levels of public services; and (2) the construction or alteration of such facilities would result in a substantial adverse physical impact on the environment.

For purposes of the impact analysis, it is assumed that any projects developed as a result of the HEU's implementation would be designed to comply with the most up-to-date building and fire codes and would include fire safety measures and equipment, including but not limited to, use of fire retardant building materials, inclusion of emergency water infrastructure (fire hydrants and sprinkler systems), installation of smoke detectors and fire extinguishers, installation of emergency response notification systems, and provision of adequate emergency access ways for

emergency vehicles. Project fire safety plans would be subject to review and approval by the City and MVFD.

4.13.5 Impacts of the Project

Impact PSR-1: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered fire protection 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. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increase in demand for fire protection and emergency medical response services from the MVFD. As discussed in Section 4.13.2, the MVFD regularly achieves its goal of responding to each emergency call within 6 minutes. The MVFD target response time of 6 minutes is more stringent than the NFPA 1710 Standard, which stipulates that the first fire engine should arrive to 90 percent of emergency calls within a range of 6:15 and 6:45 minutes. It is likely that the increase in population as a result of HEU will affect current response times. Travel time performance by region is variable and influenced by factors such as individual response unit workload, the size of the station, and the street system serving it.

The increase in population as a result of the HEU would be expected to generate the typical range of service calls, including fire, emergency medical service, and other incidents. New fire personnel, vehicles, and equipment would likely be required to provide adequate service and response times to serve future development. Therefore, the MVFD's costs to maintain equipment and facilities and to train and equip personnel would also increase. However, the additional personnel and materials costs would likely be gradual as the increase in population as a result of development under the HEU would occur incrementally over time. In accordance with General Plan Policy PSA-1.1, the City would ensure that there is adequate fire staffing, performance levels, and facilities to serve the needs of the community. As such, it would be possible to assess the need for additional fire and emergency medical service personnel and equipment and address these needs to ensure that adequate fire service response time standards are maintained. Additional fire facilities are not expected to be required to serve the population as a result of the HEU. However, if and when the construction or expansion of facilities to accommodate additional personnel or equipment should become necessary, CEQA review, General Plan provisions, Municipal Code regulations, and payment of impact fees would all be required. Therefore, the impact on fire protection and emergency medical response services would be **less than significant**.

Mitigation: None required.

Impact PSR-2: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered police 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. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increase in demand for police protection services from the MVPD. As discussed in Section 4.13.2, in 2020 the MVPD employed 181 full (143 full-time), regular, and limited period positions to serve the City population of 82,826. Based on the City's population at the time, the existing officer to resident ratio of 1.7 officer per 1,000 residents. The projected population growth without development under the HEU is approximately 134,000 residents while the projected growth with development under the HEU is approximately 142,200 residents. This difference of approximately 8,200 potential residents under the HEU site locations and anticipated development would result in a decrease in the officer to resident ratio to 1.3 officers per 1,000 residents. While there is no adopted officer-to-resident ratio in the City, the increase in population and associated increase in calls for service is likely to require additional police personnel. Additionally, as discussed in Section 4.13.2.2, in 2020 the MVPD had a response time to "Emergency" and Priority 1 Events (first unit dispatched to first unit arriving) of 4 minutes or less 62.8 percent of the time (707 out of 1,126 events). Although there is no adopted response time goal in the City, the increase in population and associated increase in calls for service is likely to result in longer response times.

Implementation of the HEU would increase overall demand on police protection services in the City. Future development is expected to generate the typical range of service calls. Additional police personnel, vehicles and equipment would likely be required to provide adequate response times to serve future growth. Therefore, the City's costs to maintain equipment and facilities and to train and equip personnel would also increase. However, the additional personnel and materials costs would likely be gradual as the increase in population would occur incrementally over time. General Plan Policy PSA-2.7 ensures MVPD service levels and facilities meet demands from new growth and development. As such, it would be possible to assess the need for additional police personnel and equipment and address these needs to ensure that the law enforcement response time standards in the community are maintained. Additional police protection facilities are not expected to be required to serve the population as a result of the HEU. However, if and when the construction or expansion of facilities to accommodate additional personnel or equipment could become necessary, CEQA review, General Plan provisions, Municipal Code regulations, and payment of impact fees would all be required. Therefore, the impact on police protection services would be **less than significant**.

Mitigation: None required.

Impact PSR-3: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered school 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. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increase in school-aged children that could be enrolled in schools. The MVWSD and MVLA would likely serve these potential school-aged students.

The total housing units required in the 6th Cycle RHNA is 11,135. However, the California Department of Housing and Community Development (HCD) recommends that jurisdictions plan for their RHNA plus a buffer of additional units equivalent to 15-30 percent. To be conservative the City intends to identify a buffer and the City projects that 15,000 units would be constructed during the HEU planning period from 2023 to 2031. Of the approximately 15,000 new units, only a small percentage (approximately 1,400 units in the sites inventory and 2,700 units beyond 2031) would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans. The HEU would increase the number of school-aged children enrolled in MVWSD schools. The MVWSD uses a student generation rate of 0.085 for market rate multifamily units, and a student generation rate of 0.308 for below market rate multifamily units for grades K-5. MVWSD's 6-8 student generation rates are 0.039 for market rate multifamily units and a student generation rate of 0.247 for below market rate multifamily units (MVWSD, 2022c). The anticipated development under the HEU would generate approximately 2,276 new students for MVWSD schools, assuming all of the new units enabled by changes in development capacity via rezoning use the MVWSD's below market rate multifamily unit student generation rate. All 15,000 units projected during the HEU planning period would conservatively generate approximately 5,480 students for MVWSD schools, using the RHNA allocation percentages for above and below market-rate units. As discussed in Section 4.13.2, MVWSD student enrollment was approximately 4,526 students as of February 2022. Student enrollment over the past couple years has been in decline with peak enrollment over the last five years being 5,132 students during the 2017-2018 school year (CDE, 2022b). The addition of new students generated under the HEU would exceed past student enrollment years, but there is currently capacity for new students. Additionally, the new students would be added to the district-wide enrollment of MVWSD schools incrementally over time as development occurs. While MVWSD for an increase in student population, the number of new students generated as a result of the HEU over time will eventually exceed past enrollment numbers. Therefore, facility updates to increase capacity would also likely be required. Any expansion of school facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

The LASD also includes enrollment areas in the City for Springer Elementary School. Approximately 146 units in the housing sites inventory would be included in this attendance area. As such, development as a result of the HEU would generate approximately 92 students at

Springer Elementary School, assuming a student generation rate of 0.63 per multifamily unit (Los Altos, 2021). Student enrollment at Springer Elementary peaked in the 2016-2017 school year at 501 students. Based on the 2020-2021 enrollment of 346 students, Springer Elementary would have capacity to serve the new students generated as a result of the HEU. As such, expansion of LASD facilities are not expected to be necessary.

The HEU would also result in an increase in school-aged children enrollment in MVLA schools. The MVLA uses a student generation rate of 0.047 9-12 grade students for market rate multifamily residential units and a student generation rate of 0.312 9-12 grade students for below market rate multifamily residential units (MLVA, 2022b). Using the aforementioned unit numbers, the anticipated development under the HEU would generate approximately 1,279 new students for MVLA schools, assuming all of the new units enabled by changes in development capacity via rezoning use the MVLA's below market rate multifamily unit student generation rate. All 15,000 units projected during the HEU planning period would conservatively generate approximately 2,930 students for MVLA schools, using the RHNA allocation percentages for above and below market-rate units. As discussed in Section 4.13.2, MVLA student enrollment was approximately 4,563 in school year 2020-2021. According to the 2020 MVLA Developer Fee Study, the District current enrollment already exceeds its capacity of 3,287 and will continue to do so. With the addition of potential school-aged children enrollment the HEU would worsen this existing capacity exceedance. Therefore, facility updates to increase capacity would also likely be required. However, the new students would be added to the district-wide enrollment of MVLA schools incrementally over time as development occurs. Any expansion of school facilities would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

The City's adherence to General Plan Policy POS-5.3 and POS-5.4, described under Section 4.13.3 would reduce the potential effects to school facilities associated with increased enrollment as a result of population growth. As described in Section 4.13.3, projects developed under the HEU would be required to comply with SB 50 and California Government Code Section 65996, which would fully mitigate the potential effect on public school facilities from the new student population that may be generated by the HEU. California Government Code Section 65996 and Education Code Section 17620 authorize school districts to levy a development fee on new residential projects to offset the costs associated with new students present in the districts as a result of new development. Section 65996 states that the payment of school impact fees that may be required by a State or local agency constitutes full and complete mitigation of school impacts from development. Therefore, this impact would be **less than significant**.

Mitigation: None required.

Impact PSR-4: Implementation of the HEU 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. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increased use in existing neighborhood and regional parks, and recreational facilities. However, the population increase and resulting use of existing neighborhood and regional parks as well as recreation facilities would occur over time as individual projects are developed. Individual projects under the HEU would be subject to the City's Parkland Dedication Ordinance, which require either dedicating land, paying a fee in lieu thereof, or both. The fees are then used for the purchase, development, and/or improvement of park and recreational facilities located in or near the neighborhood where the new development is located. In-lieu fees can also be used to fund projects that provide a community-wide asset. The Parks and Recreation Commission recommends to the City Council how these fees should be applied to park and open space projects (City of Mountain View, 2014).¹

As discussed in Section 4.13.2, *Environmental Setting*, Mountain View residents use nearby Shoreline at Mountain View Regional Park and its recreation facilities to meet recreation needs. The regional park contains a wildlife preserve consisting of wetlands, marshes, upland habitats, a golf course, and a sailing lake. New residents as a result of the HEU would be expected to use these facilities from time to time; however, given the vast size of the regional park and its facilities as well as the relatively infrequent usage that future residents would make of them, the HEU would not result in their substantial deterioration. A modest increase in usage of built facilities such as the amphitheater, boat house, launch ramp, golf course, and trails, could result from buildout of the HEU; however, this incremental growth would not be likely to trigger the construction of new built facilities over and above the already foreseen plans of these regional park facilities.

While the HEU would increase the use of existing parks and recreational facilities, individual projects under the HEU would be subject to the City's Parkland Dedication Ordinance, which requires land dedication or payment of a fee in lieu thereof. The fees are used for the purchase, development, and/or improvement of park and recreational facilities located in or near the neighborhood where the new development is located (City of Mountain View, 2014). The increased demand on existing regional parks would also not substantially increase or accelerate the physical deterioration or degradation of existing parks and recreation facilities, as these areas are much larger in size and have planned for regional recreational use. In addition, open space developed as a result of requirements for individual projects would also absorb a small portion of the demand for parks and recreational facilities by new residents. Therefore, impacts from the accelerated physical deterioration of parks and recreation resources would be **less than significant**.

¹ While the City is exploring adjusting these fees, it would be part of a broader analysis that will maintain access to high-quality parks (e.g., by identifying other funding sources, maintaining and upgrading existing parks, etc).

Mitigation: None required.

Impact PSR-5: Implementation of the HEU would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (*Less than Significant*)

Implementation of the HEU would provide for the development of additional housing units and would result in an increase in the City's population. While no specific development proposals are directly associated with the HEU, theoretical development would result in an increase in population and thus an increased demand for parks and recreation facilities. As discussed in Section 4.13.3, *Regulatory Setting*, the City has a goal of 3 acres of open space per 1,000 residents. Based on the information from the 2014 Parks and Open Space Plan, which used a 2010 population of 74,291, Mountain View is slightly below the open space standard with 2.58 acres per 1,000 residents when the North Bayshore Planning Area (which includes all of the City's regional open space) is excluded from the calculation. When the North Bayshore Planning Area is factored in, the ratio rises to 13.35 acres per 1,000 residents which is well in excess of the City's standards. At the time of this 2014 update, the City needed an additional 30.85 acres of open space to meet the City's goal of 3.00 acres of open space per 1,000 residents (City of Mountain View, 2014). Based on the current population of 82,826 with the addition of the 8,200 potential residents from the HEU enabled by changes in development capacity via rezoning, the ratio would be approximately 2.2 per 1,000 residents without the inclusion of the North Bayshore Planning Area. With this inclusion the ratio would be approximately 11.0 acres per 1,000 residents. Therefore, the HEU would worsen this existing deficiency, assuming that the North Bayshore Planning Area is not included. Based on the City's desired parkland to resident ratio, the population increase since the 2014 Parks and Open Space Plan Update as well as the addition of approximately 8,200 residents to the current population would generate a demand for up to approximately 50.2 acres of additional parkland (24.6 acres from the HEU alone). As a matter of information, when the North Bayshore Planning Area containing the regional open space is included the City well exceeds its established goal.

Individual projects under the HEU would be subject to the City's Parkland Dedication Ordinance, which requires land dedication or payment of a fee in lieu thereof. The fees are used for the purchase, development, and/or improvement of park and recreational facilities located in or near the neighborhood where the new development is located (City of Mountain View, 2014). The Fees are assessed on new residential development and additions in the City that will result in an increase in the resident population. The City's Park Land Dedication Ordinance are consistent with the Quimby Act and provide up to 3 acres of parkland per 1,000 residents added by the project, and advance the parks and recreation foals and policies of the General Plan and Parks and Open Space Plan. As the residential population of Mountain View increases as a result of the HEU, the construction of new parks and recreation facilities in the City would occur. The park projects developed as a result of the Park Land Dedication Ordinance would be required to undergo environmental review as they are identified. Appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities.

Although the HEU would worsen existing parkland deficiencies in the City, individual projects would be subject to the City's Park Land Dedication Ordinance and associated City's Standard Condition of Approval as they are developed. The City's Park Land Dedication Ordinance requires land dedication or payment of a fee in lieu thereof. The fees are used for the purchase, development, and/or improvement of park and recreational facilities located in or near the neighborhood where the new development is located and allows the City to meet the demand generated by new residential development. As noted above, parks, trails, and other recreational facilities developed as a result would be subject to environmental review as they are identified and appropriate measures would be identified and implemented as applicable to reduce any construction-related or operational effects of those facilities. Therefore, parkland impacts would be **less than significant**.

Mitigation: None required.

4.13.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to public services and recreation could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on public services and recreation is citywide.

Impact PSR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. (*Less than Significant*)

The HEU, in combination with other past, present, or reasonably foreseeable projects would increase the demand for fire protection and emergency medical response services, police protection services, and public schools. As described in Section 4.0, there are various other housing developments proposed to be constructed or under review approval consideration within Mountain View. As discussed above under Impacts PSR-1 and PSR-2, the HEU would have less than significant impacts with regard to fire and protection, emergency medical response services, and police protection services. The City would also be required to ensure compliance with development standards contained in General Plan Policy PSA-1.1 related to police and fire staffing and General Plan Policy PSA-2.7 related to police services. With regard to public schools, similar to future development under the HEU, cumulative projects would be subject to school impact fees. Therefore, when considered in the cumulative context, the HEU's public services-related impacts would not be cumulatively considerable. Cumulative impacts would be **less than significant**.

Mitigation: None required.

Impact PSR-2.CU: Implementation of the HEU, combined with cumulative development in the vicinity and citywide, would not result in significant cumulative impacts to parks and recreation. (Less than Significant Impact)

The HEU, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity would incrementally increase the demand for and use of existing parks and recreation facilities. As discussed above under Impacts PSR-4 and PSR-5, the HEU would have less than significant impacts with regard to recreation. Similar to the HEU, cumulative development would be subject to the City’s standard conditions of approval and Park Land Dedication Ordinance that contribute to long-term parks and recreational facilities planning and capacity improvements. The City would also be required to ensure compliance with General Plan Policies POS-1.1 and POS-1.2 related to the demand for parks and recreational facilities. Therefore, when considered in the cumulative context, the HEU’s parks and recreation-related impacts would not be cumulatively considerable. Cumulative impacts related to parks and recreation would be **less than significant**.

Mitigation Measure: None required.

4.13.7 Summary of Public Services and Recreation Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact PSR-1: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered fire protection 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.	Less than Significant	None required	-
Impact PSR-2: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered police 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.	Less than Significant	None required	-
Impact PSR-3: Implementation of the HEU would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered school 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.	Less than Significant	None required	-
Impact PSR-4: Implementation of the HEU 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.	Less than Significant	None required	-

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact PSR-5: Implementation of the HEU would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Less than Significant	None required	-
Impact PSR-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts.	Less than Significant	None required	-
Impact PSR-2.CU: Implementation of the HEU, combined with cumulative development in the vicinity and citywide, would not result in significant cumulative impacts to parks and recreation.	Less than Significant	None required	-

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4.14 Transportation

4.14.1 Introduction

This section assesses the potential for the HEU to result in significant adverse impacts on transportation. This section first includes a description of the existing transportation environmental setting, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the Project on transportation.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022, and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to transportation received during the NOP comment period include concerns related to reducing vehicles miles traveled (VMT), maintaining bicycle and pedestrian access during construction, and parking concerns.

Comment letters were received from the Santa Clara Valley Transportation Authority (VTA), and the California Department of Transportation (Caltrans), among other interested parties. VTA was concerned about the effects of added housing in areas not well-served by transit. Caltrans is requesting the project conform to the development requirements for projects near and adjacent to the State Transportation Network.

4.14.2 Environmental Setting

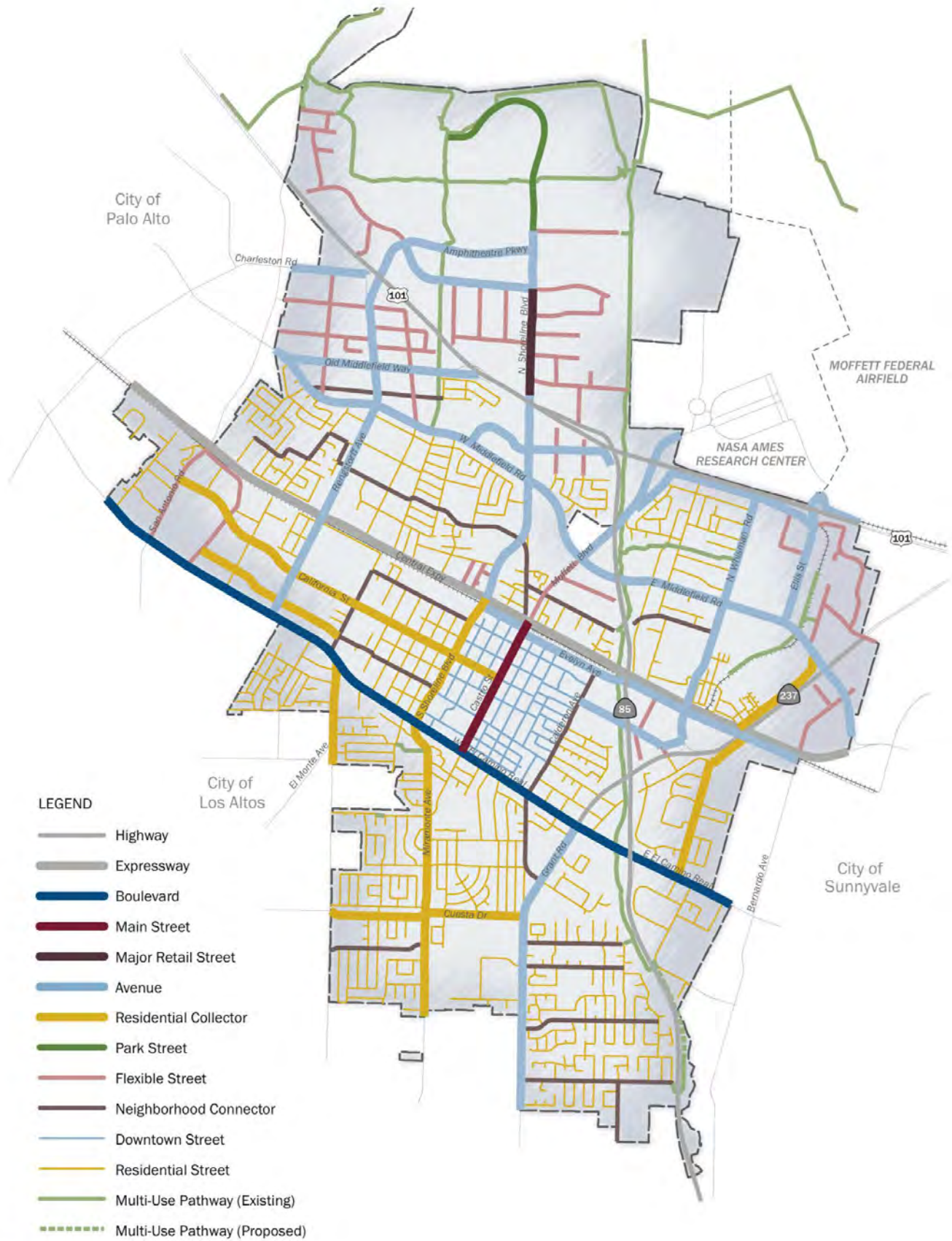
Existing Roadway Network

Regional access to Mountain View is provided via US 101, State Route 85 (SR 85) and State Route 237 (SR 237), which are designated as highways in the 2030 General Plan. Other major roadways in the City include expressways (Central Expressway), boulevards (El Camino Real) main streets (Castro Street), major retail streets (Shoreline Boulevard), and avenues (Evelyn Avenue, N. Whisman Road, Middlefield Road, Ellis Street, Rengstorff Avenue, Moffett Boulevard etc.). These streets provide access to the Project sites. The roadway network serving Mountain View, including roadway classifications from the 2030 General Plan, is shown in **Figure 4.14-1**.

The key roadways providing access to the Project sites are described below:

US 101 is a north-south highway that extends through and beyond the Bay Area, connecting San Francisco to San Jose. In Mountain View, US 101 is eight to ten lanes wide with three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction west of SR 85, and two express lanes in each direction east of SR 85.

SR 85 is a north-south highway that begins at US 101, east of N. 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 Mountain View area.



**Figure 4.14-1
Roadway Classification**

Source: Mountain View 2030 General Plan - Adopted July 2012 - Revised 09-24-21

SR 237 is a four-lane to six-lane highway within the vicinity of Mountain View 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 express lane in each direction. West of Mathilda Avenue, SR 237 has two mixed-flow lanes in each direction.

Central Expressway is an east-west, four-lane to six-lane expressway. It begins at Trimble Road in the east, crosses Sunnyvale, extends westward and transitions into Alma Street. In Mountain View, Central Expressway has two eastbound lanes and two westbound lanes and a posted speed limit of 50 mph. There are no sidewalks or bike lanes along Central Expressway, but bikes are allowed to ride on the shoulders. On-street parking is not permitted on this roadway.

El Camino Real (State Route 82) is a six-lane boulevard in the City of Mountain View that extends from Santa Clara County northerly to San Mateo County. In Mountain View, El Camino Real has a raised, landscaped median with left-turn pockets provided at intersections. On-street parking is mostly allowed on both sides of the street. The speed limit is 35 miles per hour (mph).

Middlefield Road is an east-west four-lane avenue in the City of Mountain View that runs parallel to US 101. It begins at the intersection of Central Expressway in Mountain View and traverses westward through Redwood City. Middlefield Road has landscaped medians with left-turn pockets at intersections and has bike lanes and sidewalks on both sides of the street. The speed limit is 35 mph.

Shoreline Boulevard is a north-south major retail street/avenue in the City of Mountain View that extends northward from El Camino Real across US 101 to Shoreline Park at the bay side. The four-lane roadway has landscaped medians with left-turn pockets and bike lanes and sidewalks on both sides of the street.

Existing Bicycle Facilities

Existing bicycle facilities based on the City of Mountain View Interactive Bike Map (2020) are shown on Figure 4.14-2. The following types of facilities existing in the City:

Class I Bikeways/Multi-Use Paths provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors where on-street facilities are not feasible or where sufficient right-of-way exists to allow them to be constructed.

Class II Bikeways/On-Street Bike Lanes are dedicated lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are typically at least five feet wide. Adjacent vehicle parking and vehicle/pedestrian crossflow are permitted. Class II buffered bike lanes provide greater separation from an adjacent traffic lane and/or between the bike lane and on-street parking. This separation is created with chevron or diagonal striping.

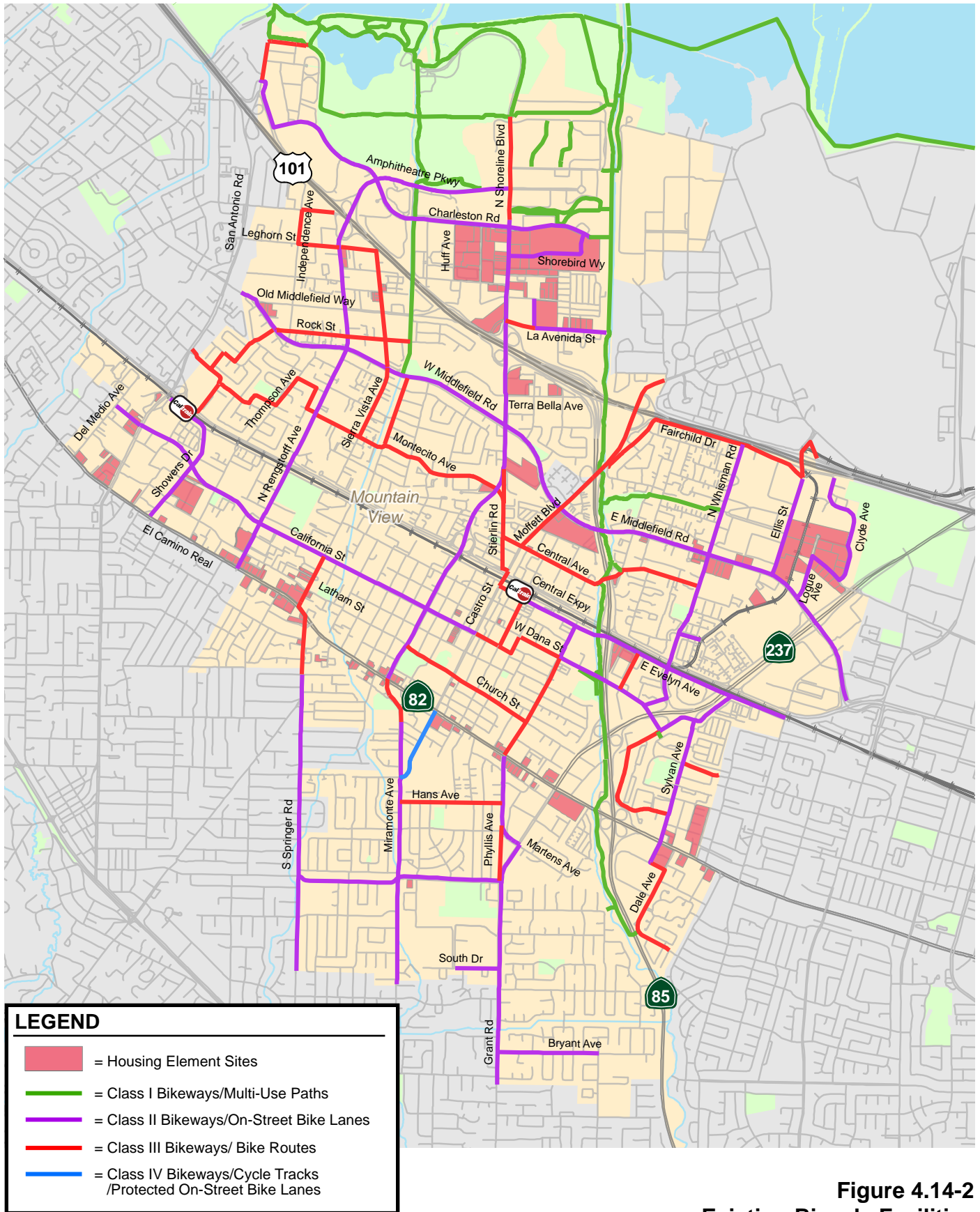


Figure 4.14-2
Existing Bicycle Facilities

Class III Bikeways/Bicycle Routes are designated by signs or pavement markings for shared use with pedestrians or motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve either to a) provide a connection to other bicycle facilities where dedicated facilities are infeasible, or b) designate preferred routes through high-demand corridors.

Class IV Bikeways/Cycle tracks/Protected On-Street Bike Lanes provide a right-of-way designated exclusively for bicycle travel within a roadway and are protected from other vehicle traffic by physical barriers, including, but not limited to, grade separation, flexible posts, inflexible vertical barriers such as raised curbs, or parked cars.

Existing bicycle facilities within or adjacent to the Housing Element Update planning sites include:

Class I multi-use paths include trails along Shoreline Park, Permanente Creek Trail, Stevens Creek Trail, trail between Alta Avenue and Shoreline Boulevard, Hetch Hetchy Trail, LRT Trail between Middlefield Road and Hetch Hetchy Right of Way, and trail along Shoreline Boulevard between Wright Avenue and Villa Street.

Class II bikeways/on-street bike lanes include a network of bike lanes in the North Bayshore region along Crittenden Lane, Garcia Avenue, Amphitheater Parkway, Charleston Road, Shoreline Boulevard, and Shorebird Way. Bike lanes also present along Moffett Boulevard, Whisman Road, Ellis Street, Clyde Avenue, Maude Avenue, Evelyn Avenue, Sylvan Avenue, California Avenue, Showers Drive, and San Antonio Road. A part time bike lane is present along Middlefield Road.

Class III bike routes are present along Shoreline Boulevard north of Charleston Road, Dale Avenue, Rainbow Drive, Pioneer Way, Escuela Avenue, and Leong Drive.

Existing Pedestrian Facilities

Pedestrian facilities in the City of Mountain View consist of sidewalks, curb ramps, crosswalks, and pedestrian signals at signalized intersections. Other pedestrian facilities include multi-use trails such as the Stevens Creek Trail, Hetch Hetchy Trail, and Permanente Creek Trail.

Most streets in Mountain View have sidewalks. The unimproved streets, that is streets lacking in sidewalks, curbs, or paved shoulder surface are located in residential neighborhoods south of El Camino Real and west of San Antonio Road.

The housing sites are proposed near the major streets in the City that have adequate pedestrian facilities.

Existing Transit Facilities

Existing transit service in Mountain View is provided by the Valley Transportation Authority (VTA), which includes bus and light rail services, Caltrain, MVgo Shuttles, and the Mountain view Community Shuttle. The transit routes that provide services near the City are shown on **Figure 4.14-3** and described in **Table 4.14-1**.

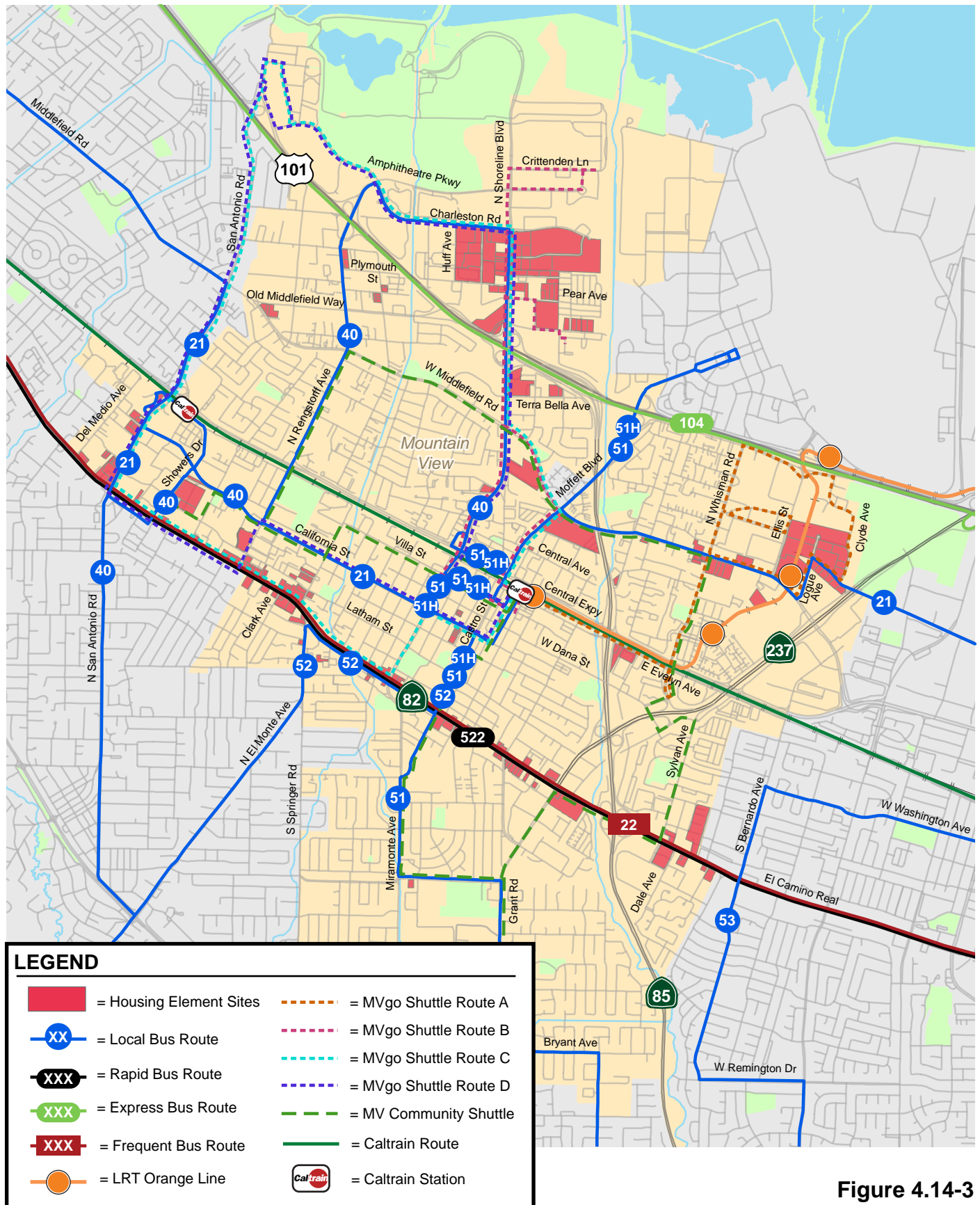


Figure 4.14-3
Existing Transit Services

**TABLE 4.14-1
EXISTING TRANSIT SERVICES**

Route	Route Description	Weekday Hours of Operation	Headways ^a (minutes)
VTA Bus Routes			
Local Route 21	Palo Alto Transit Center - Santa Clara Transit Center	5:30 AM - 10:00 PM	30
Local Route 22	Palo Alto Transit Center - Eastridge	4:13 AM - 2:59 AM (next day)	15
Local Route 40	Foothill College - Mountain View Transit Center	6:14 AM - 10:28 PM	30
Local Route 51	Moffett Field - West Valley College	6:09 AM - 7:18 PM	30
Local Route 51h	Moffett Field/Ames center – De Anza College	7:00 AM - 6:48 PM	60
Local Route 52	Foothill College - Mountain View Transit Center	7:07 AM - 6:31 PM	35
Local Route 53	Sunnyvale Transit Center - Santa Clara Transit Center	6:18 AM - 7:40 PM	30 - 35
Express 104	Milpitas BART - Stanford Research Park	6:07 AM - 7:58 AM 4:02 PM - 5:42 PM	30 - 50
Rapid Route 522	Palo Alto Transit Center - Eastridge	5:20 AM - 11:14 PM	15
MVgo Shuttle^b and Mountain View Community Shuttle^c			
MVgo Shuttles (A, B, C, D)	Mountain View Transit Center - Throughout Mountain view	6:28 AM - 10:38 AM 2:49 PM - 8:50 PM	20 - 45
MV Community Shuttle	Throughout Mountain View	7:00 AM - 7:00 PM	30
VTA Light Rail Transit and Caltrain Commuter Rail			
LRT Orange Line	Mountain View - Alum Rock	5:51 AM - 12:46 AM (next day)	20
Caltrain	Gilroy - San Francisco	4:22 AM - 1:46 AM (next day)	10 - 40

NOTES:

^a Headways during weekday peak periods as of May 2022.

^b Operated by Mountain View Transportation Management Association. It provides free transportation connections between the Mountain View Transit Center and location throughout the City.

^c Operated by Mountain View and Google. It provides free transportation connections between many residential neighborhoods, senior residences and services, city offices, library, park and recreational facilities, medical offices, shopping centers, and entertainment venues throughout Mountain View.

4.14.3 Regulatory Setting

Federal

Federal Highway Administration (FHWA)

The FHWA is a major agency of the United States Department of Transportation. In partnership with State and local agencies, the FHWA carries out Federal highway programs to meet the Nation’s transportation needs. The FHWA administers and oversees Federal highway programs to ensure that Federal funds are used efficiently.

Americans with Disabilities Act

Titles I, II, III and V of the ADA have been codified in Title 42 of the United States Code, beginning at section 12101. Title III prohibits discrimination on the basis of disability in “places of public accommodation” (businesses and non-profit agencies that serve the public) and “commercial facilities” (other businesses). The regulation includes Appendix A to Part 36

(Standards for Accessible Design) establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48” inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

State

California Department of Transportation (Caltrans)

Caltrans has authority over the State highway system, including freeways, interchanges, and arterial State Routes. Caltrans approves the planning, design, and construction of improvements for all State-controlled facilities including Highway 101, State Route (SR) 82 (El Camino Real), SR 85, SR 237, and the associated interchanges for these facilities located in Mountain View. Caltrans requirements are described in their *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2001), which covers the information needed for Caltrans to review the impacts on state highway facilities including freeway segments.

Statewide Transportation Improvement Program

The California Transportation Commission (CTC) administers transportation programming. Transportation programming is the public decision-making process, which sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The California Department of Transportation (Caltrans) manages the operation of State Highways in Mountain View.

AB 32 and Senate Bill 375

As a means to achieve the Statewide emission reduction goals set by AB 32 (“The California Global Warming Solutions Act of 2006”), SB 375 (“The Sustainable Communities and Climate Protection Act of 2008”) directs the California Air Resources Board (CARB) to set regional targets for reducing GHG emissions from cars and light trucks. Using the template provided by the State’s Regional Blueprint program to accomplish this goal, SB 375 seeks to align transportation and land use planning to reduce VMT through modified land use patterns.

There are five basic directives of the bill: 1) creation of regional targets for GHG emissions reductions tied to land use; 2) a requirement that regional planning agencies create a Sustainable Communities Strategy (SCS) to meet those targets (or an Alternative Planning Strategy if the strategies in the SCS would not reach the target set by CARB); 3) a requirement that regional transportation funding decisions be consistent with the SCS; 4) a requirement that the Regional Housing Needs Allocation numbers for municipal general plan housing element updates must conform to the SCS; and 5) CEQA exemptions and streamlining for projects that conform to the SCS. The implementation mechanism for SB 375 that applies to land uses in Mountain View is “Plan Bay Area 2050” adopted by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) in 2021 (see below).

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743. Among other things, SB 743 created a process for changing the analysis of transportation impacts under CEQA, with the analysis focusing on a project's VMT rather than impacts on intersection level of service (LOS). On December 30, 2013, the Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods for transportation analysis. The original guidance documentation was geared toward projects in areas that are designated as transit priority areas, followed by other areas of the state. OPR issued another draft discussion document in March 2015, suggesting some new revisions to the formal CEQA Guidelines. In January 2016, OPR issued another guidance document and requested additional input. In 2018, the CEQA Guidelines were revised to reflect the process set forth in SB 743 and became effective later that year, and the VMT provisions of the updated CEQA Guidelines commenced on July 1, 2020 (although lead agencies had the right to elect to be governed by these provisions earlier than July 1, 2020).

The CEQA Guidelines now identify VMT as the most appropriate metric for evaluating a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay and congestion, as measured by LOS and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA (Public Resources Code Section 21099, subdivision [b][3]). It should be noted that LOS is used outside of the CEQA document to evaluate other non-CEQA transportation impacts of development projects, such as congestion, circulation, and safety issues and concerns.

Regional

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is responsible for planning, coordinating, and financing transportation projects in the nine county Bay Area. The local agencies that comprise these nine counties help the MTC prioritize projects based on need, feasibility, and conformance with federal and local transportation policies. In addition to coordinating with local agencies, the MTC distributes State and federal funding through the Regional Transportation Improvement Program (RTIP).

Plan Bay Area

As required by SB 375, all metropolitan regions in California must complete a Sustainable Communities Strategy as part of a Regional Transportation Plan. Plan Bay Area 2050 is the sustainable community strategy for this region and integrates transportation, land use and housing to meet greenhouse gas reduction targets set by the California Air Resources Board and meets the requirements of SB 375. In addition, the plan sets a roadmap for future transportation investments and identifies what it would take to accommodate expected growth.

In the Bay Area, the Metropolitan Transportation Commission and the Association of Bay Area Governments adopted the latest plan in 2021. Under Plan Bay Area 2050's strategies, just under half of all Bay Area households would live within one half-mile of frequent transit by 2050, with

this share increasing to over 70% for households with low incomes. Transportation and environmental strategies that support active and shared modes, combined with a transit-supportive land use pattern, are forecasted to lower the share of Bay Area residents that drive to work alone from 50% in 2015 to 33% in 2050. Greenhouse gas emissions from transportation would decrease significantly as a result of these transportation and land use changes, and the Bay Area would meet the state mandate of a 19% reduction in per capita emissions by 2035.

Santa Clara County Congestion Management Program

VTA is responsible for maintaining the standards of the CMP roadway system in Santa Clara County (Santa Clara Valley Transportation Authority 2017). VTA strives to maintain LOS E on all CMP monitored facilities. Based on VTA's Guidelines, a CMP analysis shall be included in a transportation analysis if a proposed development project is expected to generate 100 net new weekday a.m. or p.m. peak hour trips. Projects that meet the 100 trip threshold, may require a CMP intersection analysis, CMP freeway analysis, and transit evaluation in conformance with the CMP standards.

Cities that fail to meet the LOS E standard on CMP facilities are required to prepare and maintain a Multimodal Improvement Plan (formerly Deficiency Plan). Mountain View adopted a Multimodal Improvement Plan in 2018.

Local

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Mobility Element of the General Plan includes the following policies related to transportation (City of Mountain View, 2012).

Goal MOB-1: Streets that safely accommodate all transportation modes and persons of all abilities.

Policy MOB-1.1: Multi-modal planning. Adopt and maintain master plans and street design standards to optimize mobility for all transportation modes.

Policy MOB-1.2: 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.

Policy MOB-1.3: Pedestrian and bicycle placemaking. Promote pedestrian and bicycle improvements that improve connectivity between neighborhoods, provide opportunities for distinctive neighborhood features and foster a greater sense of community.

Policy MOB-1.4: Street design. Ensure street design standards allow a variety of public and private roadway widths.

Policy MOB-1.5: Public accessibility. Ensure all new streets are publicly accessible.

Policy MOB-1.6: Traffic calming. Provide traffic calming, especially in neighborhoods and around schools, parks and gathering places.

Goal MOB-2: Transportation networks, facilities and services accessible to all people.

Policy MOB-2.1: Broad accessibility. Improve universal access within private developments and public and transit facilities, programs and services.

Goal MOB-3: A safe and comfortable pedestrian network for people of all ages and abilities at all times.

Policy MOB-3.1: Pedestrian network. Increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers, and other destinations throughout the city.

Policy MOB-3.2: Pedestrian connections. Increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers and other destinations throughout the city.

Policy MOB-3.3: Pedestrian and bicycle crossings. Enhance pedestrian and bicycle crossings at key locations across physical barriers.

Policy MOB-3.4: Avoiding street widening. Preserve and enhance citywide pedestrian connectivity by limiting street widening as a means of improving traffic flow.

Policy 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.

Goal MOB-4: A comprehensive and well-used bicycle network that comfortably accommodates bicyclists of all ages and skill levels.

Policy MOB-4.1: Bicycle Network. Improve facilities and eliminate gaps along the bicycle network to connect destinations across the city.

Policy MOB-4.2: Planning for bicycles. Use planning processes to identify or carry out improved bicycle connections and bicycle parking.

Policy MOB-4.3: Public bicycle parking. Increase the amount of well-maintained, publicly accessible bicycle parking and storage throughout the city.

Policy MOB-4.4: Bicycle Parking Standards. Maintain bicycle parking standards and guidelines for bicycle parking and storage in convenient places in private development to enhance the bicycle network.

Policy MOB-4.5: Promoting safety. Educate bicyclists and motorists on bicycle safety

Goal MOB-5: Local and regional transit that is efficient, frequent, convenient and safe.

Policy MOB-5.1: Transit agencies. Coordinate with local and regional transit agencies including Metropolitan Transportation Commission, VTA, JPB (Caltrain), SamTrans and the California High-Speed Rail Authority to improve transportation service, infrastructure and access in the city.

Policy MOB-5.2: California High-Speed Rail. Actively participate with the California High Speed Rail Authority in planning any future high-speed rail service to address urban design, traffic, noise and compatibility issues.

Policy MOB-5.3: Local transportation services. Create or partner with transit providers, employers, educational institutions, major commercial entities and event organizers to improve local transportation services.

Policy 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 Park.

Policy MOB-5.5: Access to transit services. Support right-of-way design and amenities consistent with local transit goals to make it easier to get to transit services and improve transit as a viable alternative to driving.

Policy MOB-5.6: Emerging technologies. Explore emerging transit technologies such as Personal Rapid Transit and their citywide applicability.

Goal MOB-6: Safe and convenient pedestrian and bicycling access to schools for all children.

Policy MOB-6.1: Safe routes to schools. Promote Safe Routes to Schools programs for all schools serving the city.

Policy MOB-6.2: Prioritizing projects. Ensure that bicycle and pedestrian safety improvements include projects to enhance safe accessibility to schools.

Policy MOB-6.3: Connections to trails. Connect schools to the citywide trail systems.

Policy MOB-6.4: Education. Support education programs that promote safe walking and bicycling to schools.

Goal MOB-7: Innovative strategies to provide efficient and adequate vehicle parking.

Policy MOB-7.1: Parking Codes. Maintain efficient parking standards that consider reduced demand due to development conditions such as transit accessibility.

Policy MOB-7.2: Off-street Parking. Ensure new off-street parking is properly designed and efficiently used.

Policy MOB-7.3: Public parking management. Manage parking so that adequate parking is available for surrounding uses.

Goal MOB-8: Transportation performance measures that help implement larger City Goals.

Policy MOB-8.1: Multi-modal performance measures. Develop performance measures and indicators for all modes of transportation, including performance targets that vary by street type and location.

Policy MOB-8.2: Level of service. Ensure performance measurement criteria optimize travel by each mode.

Policy MOB-8.3: Multi-modal 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.

Goal MOB-10: The most effective use of the city’s transportation networks and services.

Policy MOB 10.1: Efficient automobile infrastructure. Strive to maximize the efficiency of existing automobile infrastructure and manage major streets to discourage cut through traffic on neighborhood streets.

Policy MOB 10.2: Reduced travel demand. Promote effective TDM programs for existing and new development.

Policy MOB 10.3: Avoidance of street widening. Limit widening of streets as a means of improving traffic and focus instead on operational improvements to preserve community character.

Policy MOB 10.4: Emergency response. Monitor emergency response times and review emergency response time standards.

Goal MOB-11: Well-maintained transportation infrastructure.

Policy MOB-11.1: Funding. Ensure sustainable funding levels for maintaining all city transportation infrastructure.

Policy MOB-11.2: Prioritized existing facilities. Prioritize maintenance and enhancement of existing facilities over expansion.

Policy MOB-11.3: Facility types. Maintain and enhance walking, bicycling and transit related facilities to address community needs.

Policy MOB-11.4: Life-cycle costs. Examine life-cycle costs when comparing project alternative in order to make the best use of limited City resources.

Mountain View Vehicle Miles Travelled Policy

In June 2020, the City of Mountain View City Council adopted a citywide VMT policy. The policy contains screening criteria to identify projects that are presumed to have a less than significant transportation impact. Screening criteria in the Mountain View VMT policy include criteria for:

- Small projects (projects consisting of 12 or fewer single-family housing units, 20 or less multi-family housing units, and office developments of 10,000 square feet or less),
- Projects located in areas with low VMT (VMT that is 15 percent or greater below the regional average), and,
- Projects that are located within one-half mile of a major transit stop.

The policy also establishes land use-specific baselines and thresholds for evaluating transportation impacts of project types that do not meet the screening criteria. The policy establishes the Nine-County Bay Area regional reference VMT baseline and a 15 percent threshold of significance for residential and office projects.

Mountain View Bicycle Transportation Plan Update

The Mountain View Bicycle Transportation Plan Update provides a vision for improving and encouraging bicycle travel in and through Mountain View (City of Mountain View 2015). It

contains an analysis of existing bicycle facilities and provides recommendations for specific areas where facilities could be improved or expanded. The plan includes objectives, strategies, and performance measures to guide improvements to the City’s bicycle facilities, using the following categories: bicycle network; ridership; bicycle community; education, encouragement, and enforcement; and maintenance.

Mountain View Pedestrian Master Plan

The Mountain View Pedestrian Master Plan provides a vision for improving and encouraging pedestrian travel in Mountain View (City of Mountain View 2014). It contains an analysis of existing pedestrian facilities and provides recommendations for specific areas where facilities could be improved or expanded.

City of Mountain View Standard Conditions of Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to transportation, as summarized below.

Transportation Demand Management (TDM) Program

Depending on the project description, some future residential projects might not need to prepare TDM plans. However, in most cases the property owner, property manager(s), and home-owners association (HOA) or their representative(s) (collectively, “the owners”) are required to maintain a TDM program to achieve a reduction of inbound and outbound peak-hour vehicle trips generated by the site. Elements of the TDM program may provide commute and transportation alternatives to employees/residents of the project for the life of the project. The TDM program measures shall be formally accepted by the property owners prior to building permit issuance through a legal agreement or recorded document, as determined by the City Attorney, with contents to the satisfaction of the Zoning Administrator. The Property owner, or tenant, shall prepare an annual TDM report and submit it to the City as proven effectiveness of its TDM program in meeting its peak-hour vehicle trip limit. The City may assess the property owner a penalty for noncompliance to the agreed upon TDM goals and associated monitoring activities. Should a conflict arise between project-specific TDM conditions or a citywide TDM ordinance (forthcoming), the latter will supersede. Mandatory TDM measures for the project may include:

- a. Join and maintain ongoing membership in the MVTMA for the life of the project.
- b. Provide and maintain maximum vehicle parking and minimum bike parking as approved in the project, as well as end-of-trip facilities for bicyclists including showers and changing rooms. Access to shared bicycles for residents/employees will also be provided and maintained, if a bike-share service is not nearby.
- c. Provide conveniently located ride-share drop-off and waiting areas on-site.
- d. Provide and maintain shared, common, collaborative workspaces with WiFi for residents and their guests. This amenity can be offered in partnership with nearby residents and businesses.
- e. Provide monetary incentives for alternative mode of travel, such as subsidized transit passes or bike-share for residents and/or unbundled parking.

- f. Provide and maintain accessible and secure storage spaces for package delivery on-site.
- g. Provide local transportation information to all residents through a website, leasing office, and/or initial sale information.
- h. Support Safe Routes to Schools programs, including facilitating parent gatherings and coordination of walking, school buses, and/or bike trains.
- i. Provide onsite charging facilities for Electric Vehicles
- j. Reserve priority parking stalls for approved carpool and vanpool vehicles
- k. Other TDM measures as directed by the Planning Department.

Transportation Impact Fee

Prior to issuance of any building permits and prior to approval of the parcel or final map, the applicant shall pay the transportation impact fee for the development. Residential category fees are based on the number of units. Retail, Service, Office, R&D, and Industrial category fees are based on the square footage of the development. Credit is given for the existing site use(s), as applicable.

Traffic Control Plans

A traffic control plan guides pedestrians, bicyclists, and motorists safely through a work zone and is a requirement for any construction within the public right-of-way.

Upon submittal of the initial building permit and improvement plans, the applicant shall submit traffic control plans for any off-site and on-site improvements or any work that requires temporary lane closure, shoulder closure, bike lane closure, and/or sidewalk closure for review and approval. Sidewalk closures are not allowed unless reconstruction of sidewalk necessitates temporary sidewalk closure. In these instances, sidewalk detour should be shown on the Traffic Control plans. Traffic control plans shall be prepared in accordance with the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD). A completed Traffic Control Checklist shall be included with each traffic control plan submittal.

Corner Street Sight Triangle

At street corners of controlled and/or uncontrolled intersections, the site shall be compliant with Corner Triangles of Safety per the Public Works Standard Details and to the satisfaction of the Public Works Director. The project will be required to remove or modify all objects, including, but not limited to landscape, hardscape, poles, bollards, monument signs, mailbox banks/cluster, planters, retaining walls, seat walls, bicycle racks, partitions, miscellaneous structures (including columns), parking stalls, bicycle racks, etc., that are not compliant with safety triangle height and clearance requirements. Artwork, benches, tables, chairs, bicycle racks, and planters shall not be installed in this safety area. No new trees are permitted to be planted within the sight triangle.

Driveway or Side Street Sight Triangle

Sight triangles are the specified areas at intersections or driveways that should be clear of obstructions that may block a driver's view of conflicting vehicles or pedestrians.

Within the pedestrian and/or vehicle traffic safety sight triangle(s), for the project site and adjacent properties, the site shall be compliant with height and clearance requirements per the Public Works Standard Details and to the satisfaction of the Public Works Director. The project is required to remove or modify all objects, including, but not limited to landscape, hardscape, poles, bollards, signs, mailboxes, planters, retaining walls, seat walls, bicycle racks, partitions, buildings, and other structures, parking stalls, etc., that are not compliant with safety triangle height and clearance requirements.

Construction Management Plan

Upon submittal of the initial building permit and all subsequent building permit submittals, the applicant shall provide a construction traffic and parking management plan with the building plans. The plan must be approved prior to the issuance of a building permit, including demolition. The plan must show the following:

1. *Truck Route*: Truck route (to and from project site) for construction and delivery trucks pursuant to City Code Sections 19.58 and 19.59 and which does not include neighborhood residential streets;
2. *Construction Phasing, Equipment, Storage, and Parking*: Show and identify construction vehicle and equipment parking area, material storage and lay-down area, sanitation facilities, and construction trailer location for each phase of construction. All construction vehicles, equipment, and trailer shall be located on-site or at a site nearby (not on a public street or public parking) arranged by the permittee/contractor. Construction equipment, materials, or vehicles shall not be stored or parked on public streets or public parking lots, unless approved by the Public Works Director due to special conditions. Construction contractors/workers are required to park on-site or at a private property arranged by the permittee/contractor and shall not be allowed to use neighboring streets for parking/storage; and
3. *Sidewalks*: Sidewalk closure or narrowing is not allowed during any on-site construction activities.
4. *Traffic Control and Detour Plans*: Traffic control plans, including detour plans, shall be submitted to the Public Works Department for review and approval and included with building permit plans to the Building Inspection Division for any on-site improvements and/or work related to any phase of the construction management plan that requires temporary roadway closure, lane closure, shoulder closure, and/or bike lane closure. Pedestrian detour plans shall be provided when necessary. Traffic control plans shall be prepared in accordance with the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD). A completed Traffic Control Checklist shall be included with each traffic control plan submittal. A separate Excavation Permit from the Public Works Department may be required prior to issuance of the building permit.

4.14.4 Significance Criteria

The thresholds used to determine the significance of impacts related to transportation are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

- Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). For the purposes of this evaluation, this impact would be significant, if the implementation of the HEU would generate home-based VMT per resident within the HEU sites and development areas that is higher than 85 percent of the regional average home-based VMT per resident.
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

Scenarios Analyzed

The HEU is planning for the period from January 31, 2023 through January 31, 2031, and is expected to plan for approximately 15,000 new housing units within this period. Of the approximately 15,000 new units, only a small percentage would result from changes in City policy, zoning, or Precise Plans, and the balance could theoretically occur with or without the Project because it is consistent with existing policy, zoning, and Precise Plans.

The Project scenario has an analysis year of 2031, since that is the horizon of the Housing Element, and all the proposed units are expected to be built by that time. In addition, a cumulative scenario is also studied, which looks at the difference between the buildout of the City without and with the proposed General Plan, Zoning and Precise Plan Amendments.

Table 4.14-2 below presents growth projections used in this analysis and shows the amount of growth attributable to the Project and to cumulative growth and development.

**TABLE 4.14-2
 MOUNTAIN VIEW GROWTH PROJECTIONS**

	Existing Baseline (2020)	Under Construction	Proposed HEU (2021-2031)	2031 Conditions with Proposed HEU	Cumulative Growth no HEU	HEU Contribution to Cumulative Growth ³	Cumulative Growth with HEU
Dwelling Units	37,820	1,847	15,000	54,700	63,000	4,100	67,100
Population ¹	82,826	3,740	30,000	116,600	134,000	8,200	142,200
Jobs	101,965	8,800	0 ²	120,000	133,000	0 ²	133,000

SOURCE: City of Mountain View, 2022; Draft EIR Table 3-2, see Chapter 3, *Project Description*.

The City of Mountain View citywide VMT policy contains screening criteria to identify projects that are presumed to have a less than significant transportation impact. Development projects may be exempt from additional VMT analysis under the City’s VMT guidelines, which provide various screening criteria to exempt residential projects from VMT include:

- **Small Project Screening:** Single-family residential development of 12 units or fewer, multi-family residential development of 20 units or fewer, or office developments of 10,000 square feet or less.
- **Map-Based Screening:** Residential land use projects located in areas of low VMT, defined as exhibiting VMT that is 15 percent or greater below the existing Nine-County Bay Area regional reference average VMT.

- **Transit Screening:** All projects located within one-half mile of a major transit stop, or a stop along a high-quality transit corridor, pursuant to State definitions for such facilities, unless any of the following factors are exhibited by the project:
 - Floor Area Ratio (FAR) of less than 0.75;
 - Inconsistent with the applicable Sustainable Communities Strategy (SCS);
 - Provides more parking than required by the jurisdiction; or
 - Replaces affordable housing with a fewer number of moderate or high-income residential units Affordable housing developments with 100 percent affordable units, either in a low VMT area or within ½-mile of an existing major transit stop or within ½-mile of a high-quality transit corridor.
- **Affordable Housing Screening:** Projects with 100 percent affordable housing.

4.14.5 Impacts of the Project

Impact TRA-1: Implementation of the HEU would not conflict with an applicable program, plan, ordinance, or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities. (*Less-than significant*)

Implementation of the HEU would be subject to and implement General Plan policies applicable to transit, bicycle, and pedestrian facilities and service. Additionally, development projects under the HEU would be subject to all applicable City guidelines, standards, and specifications related to transit, bicycle, or pedestrian facilities.

Project Design

Specifically, any modifications or new transit, bicycle, and pedestrian facilities would be subject to and designed in accordance with all applicable General Plan policies. In particular, General Plan Policy MOB-1.2 promotes the planning, design and construction of new transportation improvement projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists, and persons of all abilities.

Mobility

Policy MOB 1.3 promotes pedestrian and bicycle improvements that improve connectivity between neighborhoods, provide opportunities for distinctive neighborhood features and foster a greater sense of community; Policy MOB 1.6 provides traffic calming, especially in neighborhoods and around schools, parks and gathering places.

Policy MOB 2.1 requires improving universal access within private developments and public and transit facilities, programs and services; Policy MOB-3.1 increases connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers, and other destinations throughout the City.

Bicycles

Policy MOB-4.1 improves facilities and eliminates gaps along the bicycle network to connect destinations across the city; Policy MOB-4.4 maintains bicycle parking standards and guidelines

for bicycle parking and storage in convenient places in private development to enhance the bicycle network.

Transit and Regional Transportation

Policy MOB-5.1 requires coordination with local and regional transit agencies including Metropolitan Transportation Commission, VTA, JPB (Caltrain), SamTrans and the California High-Speed Rail Authority to improve transportation service, infrastructure and access in the city; Policy MOB-5.4 requires identification and implementation of new or enhanced transit services to connect Downtown, El Camino Real, San Antonio, North Bayshore, East Whisman and NASA Ames Research Park; Policy MOB-5.5 supports right-of-way design and amenities consistent with local transit goals to make it easier to get to transit services and improve transit as a viable alternative to driving;

Smart Technology

Policy MOB-5.6 explores emerging transit technologies such as Personal Rapid Transit and their citywide applicability.

Schools

Policy MOB-6.1 promotes Safe Routes to Schools programs for all schools serving the City.

Accountability

Policy MOB-8.1 requires developing performance measures and indicators for all modes of transportation, including performance targets that vary by street type and location.

The City has also adopted a Bicycle Transportation Plan Update (adopted November 2015) and a Pedestrian Master Plan (adopted January 2014), which establishes the City's vision for a network of bicycle and pedestrian facilities to encourage bicycling and walking as viable modes of travel around the City. The Plan identifies specific improvement projects around the City to improve the walking and bicycling environment. The bicycle plan and pedestrian plan propose new or upgraded bicycle/pedestrian facilities and intersection improvements along major roads in the City including El Camino Real, Shoreline Boulevard, Moffett Boulevard, Middlefield Road, San Antonio Road, Logue Avenue, Maude Avenue, and Whisman Road near which the proposed housing sites are located.

The proposed HEU sites are also served by transit in the City as shown in Figure 4.14-3. The transit services in the vicinity of the proposed housing sites include the MVgo Shuttles, VTA rapid route 522, VTA frequent route 22, VTA local route (21, 40, 52), VTA LRT Orange Line, and Caltrain.

Because implementation of the HEU would be subject to all applicable City guidelines, standards, and specifications, the proposed HEU would not conflict with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. Therefore, the HEU would result in a less than significant impact to transit, bicycle, and pedestrian facilities.

Mitigation: None required.

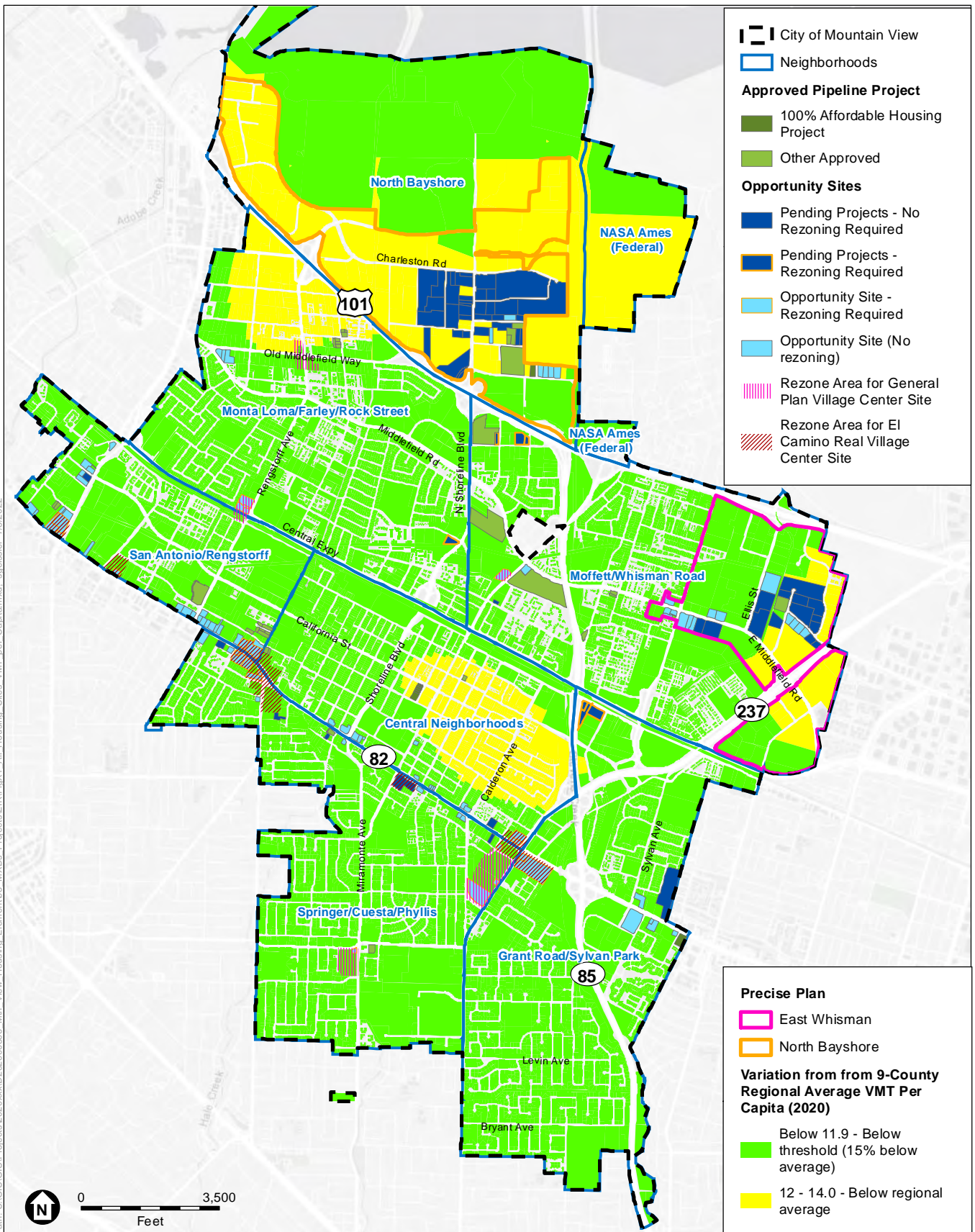
Impact TRA-2: Implementation of the HEU would not exceed an applicable VMT threshold of significance. (*Less than significant with Mitigation*)

Residential projects are evaluated based on the home-based VMT per resident metric. Home-based VMT is defined as all home-based automobile vehicle trips traced back to the residence of the trip-maker and includes the entire length of the trip. The home-based VMT is then divided by the population to calculate home-based VMT per resident. Using the VTA's travel demand model VMT data and the State's guideline, the City of Mountain View adopted the regional (nine Bay Area Counties) home-based VMT per resident as the baseline for VMT analysis. VMT's are calculated at the traffic analysis zone (TAZ) level. A TAZ is a unit of geography that contains land use attributes such as number of housing units, number of automobiles per household, household income, and employment within these zones.

The VTA Model estimated that the baseline average regional VMT per resident is 14.0 (13.95). Residential projects located in areas with low VMT near high-quality transit that incorporate transit-supporting features (i.e., density, diversity of uses, distance to multimodal facilities, and demographics) will result in low VMT. The VTA Model was also used to estimate the VMT per resident for each TAZ in Mountain View. The VMT per resident for each TAZ in Mountain View are then compared with the regional average and the results are displayed in a "heatmap," a map that provides a graphical representation of data using color.

This heatmap, which is the basis of the Mountain View's adopted VMT policy, is shown on **Figure 4.14-4** and is used as the CEQA transportation screening map for residential projects. The map shows the locations of the HEU sites (Approved Pipeline Projects and Opportunity Sites). Most HEU sites are located in low VMT areas (green areas on the map). The VMT per resident in these areas is less than 85% of the regional VMT per resident (VMT below 11.9) which means that proposed residential developments in these areas would have a less than significant VMT impact and no mitigation would be required.

The areas in yellow indicate that the VMT per resident is higher than 85 percent but still lower than the regional VMT per resident. The VMT per resident would vary between 12.0 and 14.0. Proposed residential developments in these yellow areas potentially could have a significant VMT impact and require mitigation, including transportation demand management (TDM), multimodal improvements or reduced parking. **Mitigation Measure TRA-1, Implement VMT Reduction Measures**, would ensure that VMT per resident is less than 85% of the regional VMT per resident. Requirements for sites within the North Bayshore and East Whisman Precise Plan areas are discussed below.



SOURCE: ESRI, 2022.

City of Mountain View

Figure 4.14-4
All Housing Sites and VMT per Capita



Some residential development may occur on retail sites. In many cases (such as General Plan Village Centers and El Camino Real Village Centers) the retail development would be replaced on-site as part of a mixed-use residential/retail development. However, in some cases, the retail development would be removed. This would tend to occur on underutilized retail parcels. Nevertheless, some reduction in retail square footage could occur, in which case customers would need to seek out the next closest retail establishment, which could increase trip lengths. Since Mountain View has several retail centers in proximity, especially on El Camino Real and San Antonio Road where these cases are most likely to occur, the increase in retail trip lengths is expected to be minor or non-existent. Therefore, the impact on citywide retail VMT is expected to be negligible. Also, the Mountain View VMT policy exempts local-serving retail from VMT analysis. For these reasons, the VMT impact of a potential small reduction in retail space would be less than significant.

East Whisman Precise Plan

A portion of the East Whisman Precise Plan, which was adopted by the Mountain View City Council on November 5, 2019, is located in the large yellow area on the eastern edge of Mountain View. Most of this area is screened out of VMT analysis based on its access to VTA light rail. However, in the case of lower FAR development or other conditions that would exclude the project from such screening, the East Whisman Precise Plan includes a range of Residential Transportation Demand Management (TDM) Standards to limit vehicle miles traveled, such as:

- **TMA Membership.** New residential developments with at least 100 units shall become Mountain View's Transportation Management Association (TMA) members. The TMA is sponsored by Mountain View businesses and landowners, including property owners in the North Bayshore and East Whisman areas. The key purpose of the TMA is to help its members and the surrounding community reduce vehicle congestion and improve connectivity by pooling resources and developing coordinated transportation strategies.
- **TDM Plans.** All new residential projects shall have a TDM plan with programs and measures to achieve trip-reduction consistent with the Greenhouse Gas Reduction Program, or other City trip-reduction standard.
- **TDM Monitoring.** Annual TDM monitoring will be conducted to ensure peak parking demand is not exceeded. It will include parking counts to measure the peak parking demand and resulting parking rate.
- **Monitoring Results.** Annual monitoring results shall be submitted to the City for review. The report will include a description of the measures in place and any new or modified measures since the last monitoring period. If the required trip-reduction standard is not met, a revised TDM plan will be submitted to the City identifying new programs or polices to address the exceedance and reduce the number of vehicle trips.
- **Maximum Parking.** A portion of the Precise Plan that covers the yellow area on the map has maximum parking ratios for residential development. These developments are not permitted parking greater than 1 stall per studio or 1-bedroom unit or 2 stalls per 2 bedroom or larger unit.

In addition, the Precise Plan includes a broad range of multimodal improvements intended to facilitate non-automobile travel within the area. Development in the Precise Plan would build

improvements on their frontage and would pay an impact fee to help build other improvements in the area.

Implementation of these TDM Standards, parking standards and multimodal improvements would likely meet the Tier 1 through Tier 4 mitigation measures. This means residential development in East Whisman that is not already screened out would result in a **less than significant impact with mitigation** for the HEU sites located in the East Whisman Specific Plan area.

North Bayshore Precise Plan

The North Bayshore Precise Plan is located in the large yellow area on the northern edge of Mountain View. The *North Bayshore Residential TDM Guidelines* report provides direction on how to implement and monitor a transportation demand management (TDM) program for future residential developments in North Bayshore. The document provides:

- A summary overview of the North Bayshore Residential TDM Guidelines,
- Context for a TDM program for residential development in North Bayshore,
- Detailed TDM strategies that new residential developments are required to implement, as well as additional best practices to further reduce parking and vehicle trip generation,
- A description of the tools to effectively monitor the TDM program and ensure that the program complies with City of Mountain View monitoring requirements.

To minimize vehicle trips and improve multimodal access to and within North Bayshore, the City of Mountain View requires residential projects of 10 or more units to meet a

- Residential vehicle trip performance standard. Residential projects in North Bayshore will need to limit the number of vehicles coming in and out of their site during the morning and evening peak hour periods.
- A residential mode split target. The residential mode split target means developments should aim for at least 50% of daily project trips to be made by non-driving transportation modes.
- Maximum parking standards. The maximum parking allowances for new residential development in North Bayshore as specified in the Precise Plan includes 0.5 parking spaces for one-bedroom units and one parking space for two and three bedroom units.

Implementation of these TDM measures would likely meet the Tier 1 through Tier 4 mitigation measures. This means residential development not already screened out of VMT analysis would result in a **less than significant impact with mitigation** for the HEU sites located in the North Bayshore Specific Plan area.

Mitigation Measure TRA-1: Implement VMT Reduction Measures.

Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The

City’s VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the VTA VMT tool:

- Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT.
- Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City’s approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.)
- Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs.
- Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools.

Significance after Mitigation: Less than Significant.

Impact TRA-3: Implementation of the HEU would not substantially increase hazards due to a geometric design feature or incompatible uses. (*Less than significant*)

Subsequent projects under the HEU, including any new roadway, bicycle, pedestrian, and transit infrastructure improvements would be designed according to the General Plan and other City transportation standards and subject to existing regulations that reduce or minimize hazardous conditions. With the adoption of the VMT policy, the City also established the requirement for a Multimodal Transportation Analysis (MTA) which includes an evaluation of projects’ access and circulation, vehicular level of service and queuing, and an evaluation of pedestrians, bicyclists, and transit conditions. Therefore, the HEU would result in a **less than significant impact** to transportation hazards.

Mitigation: None required.

Impact TRA-4: Implementation of the HEU would not result in inadequate emergency access. (*Less than significant*)

The General Plan and other City standards and regulations (including the City’s Standard Conditions of Approval) include policies that would ensure efficient circulation and adequate access are provided in the City, which would help facilitate emergency response. All redevelopment including those in the HEU are subject to existing policies that ensure efficient circulation and adequate access.

Additional vehicles associated with new development sites could increase delays for emergency response vehicles during peak commute hours. However, emergency responders maintain response plans that include use of alternate routes, sirens and other methods to bypass congestion and minimize response times. In addition, California law requires drivers to yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicle passes to ensure the safe and timely passage of emergency vehicles.

Based on the above considerations, adequate emergency access would be provided to new development sites, and the impact would be **less than significant**. See Section 4.8, *Hazards and Hazardous Materials*, for further information regarding emergency access and egress.

Mitigation: None required.

4.14.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future development that could cause cumulatively significant impacts. Significant cumulative impacts related to transportation could occur if the incremental impacts of the HEU combined with the incremental impacts of cumulative development would be significant, and if the HEU’s contribution would be considerable. Cumulative development projections are included in the project description and described in Section 4.0.3, *Cumulative Impacts*.

Impact TRA-1.CU: Implementation of the HEU, in combination with cumulative development, would not conflict with an applicable program, plan, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities. (*Less than significant*)

The findings of Impact TRA-1.CU are identical to Impact TRA-1. Because implementation of the HEU would be subject to all applicable City guidelines, standards, and specifications, the proposed HEU would not conflict with adopted policies, plans, or programs for transit, bicycle, or pedestrian facilities. Therefore, the HEU, in combination with cumulative development, would result in a **less than significant impact** to transit, bicycle, and pedestrian facilities.

Mitigation: None required.

Impact TRA-2.CU: Implementation of the HEU, in combination with cumulative development, would not exceed an applicable VMT threshold of significance. (*Less than significant with Mitigation*)

As discussed under Impact TRA-2, the HEU Plan's sites in the green areas of the VMT heat map shown in **Figure 4.14-4** would screen out because residential developments in these areas experience VMT per resident that are at least 15 percent below the regional VMT per resident. Residential HEU sites that are located in the yellow areas can be mitigated by implementing the mitigation measures identified in Mitigation Measure TRA-1. Therefore, the HEU Plan sites, in combination with cumulative developments, would also result in a **less than significant** VMT impact with mitigation.

Mitigation Measure TRA-1.CU: Implement VMT Reduction Measures. (See Impact TRA-2 above)

Impact TRA-3.CU: Implementation of the HEU, in combination with cumulative development, would not substantially increase hazards due to a geometric design feature or incompatible uses. (*Less than Significant*)

Impact discussion is identical to Impact TRA-3. New development – including development allowed by the HEU -- is subject to review for conformance with design standards and specifications which address potential design hazards including sight distance, driveway placement, and signage and striping. The HEU, in combination with cumulative development, would result in a **less than significant impact** to transportation hazards.

Mitigation: None required.

Impact TRA-4.CU: Implementation of the HEU, in combination with cumulative development, would not result in inadequate emergency access. (*Less than Significant*)

Impact discussion is identical to Impact TRA-4. New development – including development allowed by the HEU -- is subject to review for conformance with design standards and specifications which address emergency access. The HEU, in combination with cumulative development, would result in a **less than significant impact** to emergency access.

Mitigation: None required.

4.14.7 Summary of Transportation Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact TRA-1: Implementation of The HEU would not conflict with an applicable program, plan, ordinance, or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities.	Less than Significant	None required	-
Impact TRA-2: Implementation of the HEU would exceed an applicable VMT threshold of significance.	Potentially Significant	Mitigation Measure TRA-1: Implement VMT Reduction Measures	Less than Significant with Mitigation
Impact TRA-3: Implementation of the HEU would not substantially increase hazards due to a geometric design feature or incompatible uses.	Less than Significant	None required	-
Impact TRA-4: Implementation of the HEU would not result in inadequate emergency access.	Less than Significant	None required	-
Impact TRA-1.CU: Implementation of the HEU, in combination with cumulative development, would not conflict with an applicable program, plan, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, including transit, bicycle, and pedestrian facilities.	Less than Significant	None required	-
Impact TRA-2.CU: Implementation of the HEU, in combination with cumulative development, would exceed an applicable VMT threshold of significance.	Potentially Significant	Mitigation Measure TRA-1.CU: Implement VMT Reduction Measures	Less than Significant with Mitigation
Impact TRA-3.CU: Implementation of the HEU, in combination with cumulative development, would not substantially increase hazards due to a geometric design feature or incompatible uses.	Less than Significant	None required	-
Impact TRA-4.CU: Implementation of the HEU, in combination with cumulative development, would not result in inadequate emergency access.	Less than Significant	None required	-

4.14.8 References

City of Mountain View, 2021. *Mountain View 2030 General Plan*, adopted July 10, 2012, as amended through April 13, 2021.

City of Mountain View, 2021. *Multi-Model Transportation Analysis Handbook, Version 1.0*, adopted February 2021.

City of Mountain View, 2019. *East Whisman Precise Plan* adopted November 5, 2019, Amended October 13, 2020.

City of Mountain View, 2017. *North Bayshore Precise Plan* adopted December 12, 2017

City of Mountain View, 2015. *Bicycle Transportation Plan Update*, adopted November 2015.

City of Mountain View, 2014. *Mountain View Pedestrian Master Plan*.

4.15 Utilities and Service Systems

4.15.1 Introduction

This section assesses the potential for the HEU to result in significant adverse impacts on utilities and service systems. This section first includes a description of the existing environmental setting as it relates to utilities and service systems, and provides a regulatory framework that discusses applicable federal, state, and local regulations. This section also includes an evaluation of potential significant impacts of the HEU on utilities and service systems.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. No comments relating to utilities and service systems were received during the NOP comment period.

4.15.2 Environmental Setting

Water

Water Distribution

The City owns, operates, and maintains a potable water distribution system that serves water throughout Mountain View. Several small pockets within the City are served by neighboring Cal Water. 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 pipes of varying composition, ages and sizes (City of Mountain View, 2021a).

The City's 2010 Water System Master Plan includes recommendations for hydraulic improvements to maintain service for existing and future development, based on growth assumptions, design criteria, and hydraulic modeling data. An update to the City's water master plan is currently underway, and expected to be completed in late 2022 (City of Mountain View, 2021b).

Water Supply

The City of Mountain View receives the majority of drinking water from the City and County of San Francisco's Regional Water System (Regional System), operated by the San Francisco Public Utilities Commission (SFPUC). Mountain View is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the 26 water agencies that purchase water wholesale from SFPUC. Mountain View also purchases water wholesale from the Santa Clara Valley Water District (Valley Water) and pumps local groundwater from City-owned wells. Mountain View has a recycled water distribution system to meet non-potable demand in the North Bayshore Area. In 2020, the City's water supply production was 84 percent SFPUC, 10 percent Valley Water, 2 percent groundwater, and 4 percent recycled water (City of Mountain View, 2021a).

Wastewater

Wastewater Conveyance

Mountain View's sanitary sewer system includes 159 miles of mains and two pump stations to carry wastewater from the City to the Regional Water Quality Control Plan (RWQCP) in Palo Alto for treatment. The City's sanitary sewer capital costs are funded with sanitary sewer service charges from ratepayers, and the relatively new funding sources of utility impact fees in North Bayshore and the sanitary sewer capacity charges on new development. Over the past 30 years, the City's capital costs have primarily consisted of funding annual replacement of end-of-life sanitary sewer mains and services. Around 2012, the City also began evaluating and programming projects for replacement of major infrastructure, such as large trunk mains, creek and freeway crossings to improve reliability, and the City's sanitary sewer pump station (City of Mountain View, 2021b). The City's 2018 Sewer System Management Plan provides a plan and schedule for the City to properly manage, operate, and maintain all parts of its wastewater collection system. The plan helps to either prevent sanitary sewer overflows or reduce their extent, and also helps mitigate any sanitary sewer overflows that do occur (City of Mountain View, 2018). An update to the City's wastewater master plan is currently underway, and expected to be completed in late 2022.

Wastewater Treatment

Mountain View pumps its wastewater to the RWQCP for treatment, which is owned and operated by the City of Palo Alto. The RWQCP serves the communities of Los Altos, Los Altos Hills, Mountain View, Palo Alto, and East Palo Alto as well as Stanford University. Wastewater from these communities is treated by the RWQCP prior to discharge to the Bay. The RWQCP has a design capacity of 39 million gallons per day (mgd). Mountain View has an annual wastewater capacity allotment of 15.1 mgd at the plant. Mountain View's 2020 wastewater generation was 6.88 mgd (City of Mountain View, 2021a). The City's agreement with the City of Palo Alto states that, when Mountain View reaches 80 percent of the 15.1 mgd allowed by contract (approximately 12.08 mgd), the City may be asked to assist in future plant expansions (City of Mountain View, 2012b).

Stormwater

The stormwater collection and treatment system within the vicinity of the Project site is owned and operated by the City of Mountain View Public Works Department. The City's storm drainage system includes an underground gravity piping network, cross culverts, drywells, a detention pond, and five pump stations. Approximately 80 percent of the storm drain system discharges to Stevens and Permanent creeks. The remainder discharges to the Permanente Diversion Channel, Adobe Creek, and other sloughs which eventually drain into the bay (City of Mountain View, 2012a). While the City's storm drain system is less demanding of ongoing capital investment than the water and wastewater sewer systems, major repairs and upgrades are needed periodically. The primary capital demands related to the storm drainage system are aging pump stations, deteriorating storm culverts, and installation of green stormwater infrastructure and trash capture devices to comply with State regulations. In June 2019, Council approved the Storm Drain Fee Study to evaluate options for a storm drain service charge (City of Mountain View, 2021b).

Other Utilities

Electricity and Natural Gas

Electricity in the City is provided by Pacific Gas & Electric (PG&E) and Silicon Valley Clean Energy (SVCE). SVCE, is a Community Choice Energy Agency governed by 13 communities in Santa Clara County. SVCE purchases energy directly from the energy source and delivers to customers through existing PG&E infrastructure. Customers are automatically enrolled in the Carbon Free program which includes electricity generated from renewable and carbon-free sources. Customers can also choose a 100 percent renewable plan or can opt out and choose PG&E generation service which is approximately 80 percent carbon free (SVCE, 2022). Customers who choose to opt out of SVCE's energy plans receive electricity from PG&E. PG&E also provides natural gas service to the City.

Telecommunications

The City has two main telecommunications providers which are widely available within the City: AT&T and Xfinity from Comcast. There are at least nine residential internet providers in the City. The average household in the City is determined to have 6-7 choices for residential internet providers, which is considered to be above average (Broadband Now, 2022).

Solid Waste

Recology Mountain View provides solid waste, recycling and organics collection services for residents and businesses in Mountain View. Once collected, solid waste and recyclables are transported to the Sunnyvale Materials Recovery and Transfer (SMaRT) station for sorting and organics are transported to Recology's composting facilities. Small quantities of waste may be transported to other landfills in the area by private contractors. Non-recyclable waste from the SMaRT station is transported to Waste Management's Kirby Canyon Landfill in San José. Kirby Canyon Landfill has a permitted capacity of 36.4 million cubic yards and a permitted throughput of 2,600 tons of solid waste per day. As of 2017 (the issuance of its most recent facility permit), the Kirby Canyon Landfill had an estimated remaining capacity of 16.2million cubic yards and an estimated closure year of 2059 (CalRecycle, 2017).

In 2019, the statewide average disposal rate was 6.7 pounds per resident per day with a total of approximately 42.2 million tons of solid waste landfilled (CalRecycle, 2021). The annual average disposal rate for the City of Mountain View in 2020 was 3.2 pounds per resident per day (CalRecycle, 2022).

In 2018, the City Council adopted a Zero Waste Policy which established a goal of diverting 80 percent of materials from landfill by 2020, and 90 percent by 2030. The City's diversion rate was 79 percent in 2020. The City Council reviewed and approved the final Zero Waste Plan on October 29, 2019 (City of Mountain View, 2019).

4.15.3 Regulatory Setting

Federal

National Pollutant Discharge Elimination System

The NPDES is a nationwide program for permitting of surface water discharges, including from municipal and industrial point sources. In California, NPDES permitting authority is delegated to and administered by the nine regional water quality control boards (regional water boards). The San Francisco Bay Regional Water Board has set standard conditions for each permittee in the Bay Area, including effluent limitation and monitoring programs. In addition to issuing and enforcing compliance with NPDES permits, each regional water board prepares and revises the relevant basin plan (refer to the following discussion of state regulations).

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), Subtitle D, contained in Title 42 of the United States Code Section 6901 et seq. contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills. The U.S. EPA waste management regulations are codified in Title 40 of the Code of Federal Regulations (CFR) parts 239–282. The RCRA Subtitle D is implemented by Title 27 of the PRC, approved by the U.S. EPA.

State

Urban Water Management Planning Act

California Water Code Section 10610 et seq. requires all public water systems that provide water for municipal purposes to more than 3,000 customers, or that supply more than 3,000 acre-feet per year (AFY), to prepare an Urban Water Management Plan (UWMP). UWMPs are key water supply planning documents for municipalities and water purveyors in California, and often form the basis of Water Supply Assessments (WSAs) (refer to the following discussion of Senate Bill [SB] 610 and SB 221) prepared for individual projects. UWMPs must be updated at least every 5 years on or before July 1, in years ending in 5 and 0. The City adopted its 2020 UWMP and an associated Water Shortage Contingency Plan in June 2021 (City of Mountain View, 2021).

Senate Bills 610 and 221

The purpose and legislative intent of SB 610 and SB 221, enacted in 2001, is to preclude the approval of certain development projects without specific evaluations performed and documented by the local water provider that indicate that water is available to serve the project. SB 610 requires the local water provider for a large-scale development project to prepare a WSA.¹ The WSA evaluates the water supply available for new development based on anticipated

¹ All projects that meet any of the following criteria require a WSA: (1) A proposed residential development of more than 500 dwelling units; (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (3) a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) a proposed hotel or motel, or both, having more than 500 rooms; (5) a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified in SB 610; or (7) a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

demand. The WSA must be included in the environmental document. The lead agency may evaluate the information presented in the WSA, and then must determine whether the projected water supplies would be sufficient to satisfy the project's demands in addition to existing and planned future uses.

SB 221 requires the local water provider to provide "written verification" of "sufficient water supplies" to serve subdivisions involving more than 500 residential units per Government Code Section 66473.7. Sufficiency is different under SB 221 than under SB 610. Under SB 221, sufficiency is determined by considering:

- The availability of water over the past 20 years;
- The applicability of any urban-water shortage contingency analysis prepared in compliance with Water Code Section 10632;
- The reduction in water supply allocated to a specific use by an adopted ordinance; and
- The amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer.

As a result of the information contained in the written verification, as part of the tentative map approval process, a city or county may attach conditions to ensure that an adequate water supply is available to serve the proposed plan. Typically, following project certification, an additional water supply verification must be completed at the tentative map stage, prior to adoption of the final map, for certain tentative maps. In most cases, a WSA prepared under SB 610 would meet the requirement for proof of water supply under SB 221.

Assembly Bill 325

Assembly Bill (AB) 325, the Water Conservation in Landscaping Act of 1990, directs local governments to require the use of low-flow plumbing fixtures and the installation of drought-tolerant landscaping in all new development. Pursuant to the Water Conservation in Landscaping Act, the California Department of Water Resources developed a Model Water Efficient Landscape Ordinance.

California Health and Safety Code Section 116555

Under California Health and Safety Code Section 116555, a public water system must provide a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Senate Bill 7 (2016)

In September 2016, Governor Jerry Brown signed into law SB 7, which requires new multi-family residential rental buildings in California constructed after January 1, 2018, to include a sub-meter for each dwelling unit and to bill tenants in apartment buildings accordingly for their water use to encourage water conservation.

Executive Orders B-29-15 and B-37-16

In April 2015, Governor Brown issued Executive Order B-29-15, which called for mandatory water use reductions. The executive order required cuts for public landscaping and institutions

that typically use large amounts of water (e.g., golf courses), banned new landscape irrigation installation, and required municipal agencies to implement conservation pricing, subsidize water-saving technologies, and implement other measures to reduce the state's overall urban water use by 25 percent. The order also required local water agencies and large agricultural users to report their water use more frequently.

In May 2016, Governor Brown issued Executive Order B-37-16, which made the mandatory water use reduction of 25 percent permanent and directed the California Department of Water Resources and State Water Resources Control Board (State Water Board) to strategize further water reduction targets. The order also made permanent the requirement that local agencies report their water use monthly. Additionally, certain wasteful practices such as sidewalk hosing and runoff-causing landscape irrigation were permanently outlawed, while local agencies must prepare plans to handle droughts lasting 5 years.

Executive Order N-7-22

On March 28, 2022, Governor Gavin Newsom issued Executive Order (EO) N-7-22 in response to intensifying drought conditions. Among other requirements, EO N-7-22 limits a county, city or other public agency's ability to permit modified or new groundwater wells, and instructs the SWRCB to consider (1) requiring certain water conservation measures from urban water suppliers and (2) banning non-functional or decorative grass at businesses and institutions.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (Division 7 of the California Water Code) provides the basis for water quality regulation in California. The Porter-Cologne Act defines water quality objectives as the limits or levels of water constituents that are established for reasonable protection of beneficial uses of surface, ground, and saline waters of the state. The State Water Board administers water rights, water pollution control, and water quality functions throughout California, while the San Francisco Bay Regional Water Board conducts regional planning, permitting, and enforcement activities. For additional requirements, refer to Section 4.9, *Hydrology and Water Quality*.

Water Quality Order No. 2004-12-DWQ

In July 2004, the State Water Board adopted Water Quality Order No. 2004-12-DWQ (General Order) which incorporates the minimum standards established by the Part 503 Rule and expands upon them to fulfill obligations to the California Water Code. However, since California does not have delegated authority to implement the Part 503 Rule, the General Order does not replace the Part 503 Rule. The General Order also does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of biosolids subject to their jurisdiction, as allowed by law.

California Green Building Standards Code

Water and Wastewater

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, conserve natural resources, and

promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Mandatory measures related to water conservation include water-conserving plumbing fixture and appliance requirements, including flow rate maximums, compliance with state and local water-efficient landscape standards for outdoor potable water use in landscape areas, and recycled water systems, where available. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the 2019 amendments to the CALGreen Code became effective January 1, 2020. Updates include more stringent requirements for residential metering faucets, and a requirement that all residential and non-residential developments adhere to a local water efficient landscape ordinance or to the State of California's Model Water Efficient Landscape Ordinance, whichever is more stringent.

Solid Waste

As amended, the California Green Building Standards Code (CALGreen Code) requires readily accessible areas to collect recycling and organic waste that serve all buildings on the site for occupants of multi-family residential units (CALGreen Code Title 24, Part 11 and Mountain View City Code Section 8.20.34.). The CALGreen Code also requires that residential building projects recycle and/or salvage for reuse a minimum of 65 percent of their non-hazardous construction and demolition waste or comply with a local construction and demolition waste management ordinance, whichever is more stringent (Section 5.408.1). The 2016 version of the code increased the minimum diversion requirement for non-hazardous construction and demolition waste to 65 percent from 50 percent (in the 2013 and earlier versions) in response to AB 341, which declared the policy goal of the state that not less than 75 percent of solid waste generated would be source reduced, recycled, or composted by 2020.

Assembly Bill 939 (California Integrated Waste Management Act)

AB 939, enacted in 1989 and known as the California Integrated Waste Management Act (Public Resources Code Section 40050 et seq.), requires each city and county in the state to prepare a Source Reduction and Recycling Element to demonstrate a reduction in the amount of waste being disposed to landfills. The act required each local agency to divert at least 50 percent of all solid waste (from 1990 levels), beginning January 1, 2000, and at least 75 percent by 2010. . Diversion includes waste prevention, reuse, and recycling. In 2006, SB 1016 revised the reporting requirements of AB 939 by implementing a per capita disposal rate based on a jurisdiction's population (or employment) and its disposal. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to an actual disposal measurement number, along with an evaluation of program implementation efforts.

The Integrated Waste Management Act requires local agencies to maximize the use of all feasible source reduction, recycling, and composting options before using transformation (incineration of solid waste to produce heat or electricity) or land disposal. The act also resulted in the creation of the state agency now known as the California Department of Resources Recycling and Recovery (CalRecycle). Under the Integrated Waste Management Act, local governments develop and implement integrated waste management programs consisting of several types of plans and policies, including local construction and demolition ordinances. The act also set in place a comprehensive statewide system of permitting, inspections, and maintenance for solid waste

facilities, and authorized local jurisdictions to impose fees based on the types and amounts of waste generated.

In 2011, AB 341 amended AB 939 to declare the policy goal of the state that not less than 75 percent of solid waste generated would be source reduced, recycled, or composted by the year 2020, and annually thereafter.

Assembly Bills 341 and 1826

AB 341, signed into law in 2012, requires multi-family residential dwellings, businesses and schools to recycle. AB 1826 (2014) furthered diversion and recycling requirements by requiring that businesses and multi-family dwellings with more than five units also divert organic material. AB 1826 does not require multi-family dwellings to divert compostable food scraps. However, as of January 2022, SB 1383 requires all generators to divert organic waste including food scraps and the City must enforce these provisions.

Senate Bill 1383

SB 1383 established 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. SB 1383 granted CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets. It also established a target of recovering not less than 20 percent of currently disposed edible food for human consumption by 2025.

Effective January 1, 2022, the City of Mountain View's Mandatory Organic Waste Disposal Reduction Ordinance is the enforceable mechanism to regulate all generator compliance with SB 1383. To comply with this ordinance, residential trash would be collected in four different streams: trash, paper/cardboard recyclables, mixed container recyclables (food and beverage) and organics (food scraps and green material).

Regional

National Pollutant Discharge Elimination System Waste Discharge Regulations

Discharges of stormwater runoff from municipal separate storm sewer systems (MS4s) are regulated by the Municipal Regional Stormwater NPDES permit, under Order No. R2-2022-0018, issued by the San Francisco Bay Regional Water Board.

Under Clean Water Act Section 402(p), stormwater permits are required for discharges from MS4s that serve populations of 100,000 or more. The Municipal Regional Permit (MRP) manages the Phase I Permit Program (serving municipalities of more than 100,000 people), the Phase II Permit Program (for municipalities of fewer than 100,000 people), and the Statewide Storm Water Permit for the California Department of Transportation.

The State Water Board and the individual water boards implement and enforce the MRP. Multiple municipalities, including the City of Mountain View, along with Santa Clara County, are co-permittees.

Municipal Regional Permit Provision C.3

Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 5,000 square feet or more of impervious surface area, are required to implement site design, source control, and Low Impact Development–based stormwater treatment controls to treat post-construction stormwater runoff. Low Impact Development–based treatment controls are intended to maintain or restore the site’s natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and for using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures be properly installed, operated, and maintained.

In addition, the MRP requires new development and redevelopment projects that create or replace 1 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, generate silt pollutants, or cause other impacts on local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimum size threshold, drain into tidally influenced areas or directly into San Francisco Bay, or drain into hardened channels, or if they are infill projects in sub-watersheds or catchment areas that are at least 65 percent impervious.

Local

City of Mountain View Water Conservation in Landscaping Regulations

The City of Mountain View adopted the Water Conservation in Landscaping Regulations and the in 2010 in order to reduce water waste in landscaping by establishing standards for irrigation efficiency. These regulations were updated in 2016 and apply generally to new and rehabilitated landscapes of 500 square feet or greater.

Mountain View Green Building and Reach Codes

On November 12, 2019, the City Council adopted the Mountain View Green Building Code (MVGBC) amendments, which include the Reach Code efforts. The MVGBC amends the State-mandated California Green Building Code (CALGreen) to include local green building standards and requirements for private development. Section 8.20.9 of the MVGBC amends Subsection 101.10.1.1.3 of the 2019 California Green Building Standards Code as follows:

All multifamily residential new construction with three units or more must comply with the following:

- a. The mandatory measures of the 2019 California Green Building Standards Code and any Mountain View amendments;
- b. Demonstrate energy compliance to meet or exceed Title 24, Part 6;
- c. 15 percent of the parking spaces shall be equipped with EV2 chargers installed and one Level 3/DC Fast Charger shall be provided for every 100 spaces’
- d. Installation of photovoltaic (PV) panels on 50 percent of roof area (a project may submit for an exception by providing documentation that the required percentage of PV installation will over-generate the kWh required to operate the proposed structure on an annual basis);

- e. Space-conditioning equipment shall be electric, not be fueled by natural gas;
- f. Water-heating systems and equipment shall be electric or solar, not be fueled by natural gas;
- g. Clothes dryers shall be electric, not be fueled by natural gas; and
- h. Cooking appliances and fireplaces shall be electric, not fueled by natural gas.

City of Mountain View Urban Water Management Plan

The City's UWMP provides an analysis of the City of Mountain View's available water supply, during normal and dry-year scenarios, compared to current and projected water demand. The UWMP is a link between land use planning and water supply planning, developed to evaluate if sufficient water is available to meet the needs of Mountain View's existing and future water customers. The City adopted its 2020 UWMP and an associated Water Shortage Contingency Plan in June 2021 (City of Mountain View, 2021).

The City's 2020 UWMP found that projected water demand during normal and dry-year scenarios would be met using a combination of existing supplies and demand-reduction measures. Valley Water, local groundwater, and recycled water supplies are projected to be fully available during all year types (normal and dry) through 2045. Based on the information provided by the SFPUC under their Bay Delta Plan scenario,² Mountain View will have full SFPUC supply availability during normal years but will experience SFPUC supply shortfalls between 36 percent and 54 percent during dry years. Mountain View expects to meet current and future water needs during normal years but will experience 20 percent potable water supply shortfalls during dry years. These shortfalls would be made up through implementation of demand-reduction strategies, consistent with the City's Water Shortage Contingency Plan.

Mountain View's Water Shortage Contingency Plan serves as a flexible framework of planned response measures to mitigate water supply shortages. The Plan describes demand-reduction strategies to meet various stages of shortages, including up to 10 percent, 11 percent to 25 percent, 26 percent to 40 percent, and greater than 40 percent. Each stage includes a set of demand reduction actions that become progressively more stringent as the shortage condition escalates. All of the stages are designed to provide adequate water to protect public health and safety and satisfy the City's fire protection needs.

City of Mountain View Water System Master Plan

The City's 2010 Water System Master Plan includes recommendations for hydraulic improvements to maintain service for existing and future development, based on growth assumptions, design criteria, and hydraulic modeling data. An update to the City's water master

² The State Water Board has amended the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay Delta Plan) to establish water quality objectives to maintain the health of the Bay Delta ecosystem. A main goal of the Bay Delta Plan is to increase salmon populations in the Bay Delta and three San Joaquin River tributaries. One of the affected tributaries is the Tuolumne River, which is SFPUC's primary water source. If the Bay Delta Plan is implemented as adopted, the SFPUC will be able to meet system demand in normal years, but the SFPUC would experience supply shortages during dry years ranging from 30 percent to 49 percent. The State Water Board, SFPUC, and others are currently negotiating a voluntary alternative to the Bay Delta Plan. At this time, the final resolution of this process is uncertain.

plan is currently underway, and expected to be completed in late 2022. The update will identify and prioritize utility needs and will help determine the level of investment needed over the next 10 years compared to funding expected to be available (City of Mountain View, 2021b).

City of Mountain View Sewer System Management Plan

The 2018 Sewer System Management Plan includes policies and procedures necessary for the planning, management, operation, and maintenance of the City's sewer system. The SSMP is intended to meet the requirements of the SWRCB General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies (City of Mountain View, 2018). An update to the City's sewer system management plan is currently underway, and expected to be completed in late 2022. The update will identify and prioritize utility needs and will help determine the level of investment needed over the next 10 years compared to funding expected to be available (City of Mountain View, 2021b).

City of Mountain View Construction and Demolition Debris Ordinance

The City's Green Building Code (Chapter 8, Division III) requires at least 65 percent landfill diversion of debris from nearly every construction, renovation and/or demolition project through salvage and recycling, which supersedes the City's Construction and Demolition Debris Ordinance.

City of Mountain View Zero Waste Resolution and Zero Waste Strategic Plan

In June 2018, the City Council adopted a zero-waste policy and in October 2020 a Zero Waste Plan, establishing a goal of 90 percent diversion of waste from the landfill by 2030. The goal of the initiatives of the City's zero-waste plan is to reduce the per capita disposal rate for both residential and commercial sources.

Mountain View 2030 General Plan

The Mountain View 2030 General Plan is the guiding document for the City's physical development and preservation. It includes goals, policies and graphics that convey a long-term vision and guide local decision-making to achieve that vision. The Infrastructure and Conservation Element of the General Plan includes the following policies related to utilities and service systems (City of Mountain View, 2012a).

Policy INC-1: Utilities for New Development. Ensure adequate utility service levels before approving new development.

Policy INC 2.4: Emergency Preparedness and Critical Infrastructure. Ensure emergency preparedness for all critical infrastructure including potable water, wastewater, stormwater, recycled water, telecommunications, energy and streets.

Policy INC 4.1: Water Supply. Maintain and reliable water supply

Policy INC 5.2: Citywide water conservation. Reduce water waste and implement water conservation and efficiency measures throughout the city.

Policy INC 6.1: Citywide wastewater. Ensure high-quality wastewater collection services and a well-maintained wastewater system.

Policy INC 6.2: Pollution Source Control. Implement an effective and comprehensive industrial pretreatment program and industrial, commercial and residential pollution source control programs.

Policy INC 8.2: National Pollutant Discharge Elimination System Permit. Comply with requirements in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP).

Policy INC 8.5: Site-specific stormwater treatment. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC 8.6: Green Streets. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC 8.7: Stormwater quality. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC 10.4: Construction waste reuse. Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy 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 reduction programs.

Mountain View Standard Conditions for Approval

As part of discretionary review, the City has standard conditions for different types of approvals (updated as of October 25, 2021). The City has standard conditions relating to utilities and services systems, as summarized below. These include, but are not limited to:

Landscape Design

Landscape design shall minimize runoff and promote surface filtration. Examples include: (a) no steep slopes exceeding 10%; (b) using mulches in planter areas without ground cover to avoid sedimentation runoff; (c) installing plants with low water requirements; and (d) installing appropriate plants for the location in accordance with appropriate climate zones. Identify which practices will be used in the building plan submittal.

Efficient Irrigation

Common areas shall employ efficient irrigation to avoid excess irrigation runoff. Examples include: (a) setting irrigation timers to avoid runoff by splitting irrigations into several short cycles; (b) employing multi-programmable irrigation controllers; (c) employing rain shutoff devices to prevent irrigation after significant precipitation; (d) use of drip irrigation for all planter areas which have a shrub density that will cause excessive spray interference of an overhead system; and (e) use of flow reducers to mitigate broken heads next to sidewalks.

Stormwater Treatment (C.3)

This project will create or replace more than ten thousand (10,000) square feet of 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.” The City’s guidelines also describe the requirement to select Low-Impact Development (LID) types of stormwater treatment controls; the types of projects that are exempt from this requirement; and the Infeasibility and Special Projects exemptions from the LID requirement.

The “Stormwater Quality Guidelines for Development Projects” document requires applicants to submit a Stormwater Management Plan, including information such as the type, location, and sizing calculations of the treatment controls that will be installed. Include three stamped and signed copies of the Final Stormwater Management Plan with the building plan submittal. The Stormwater Management Plan must include a stamped and signed certification by a qualified Engineer, stating that the Stormwater Management Plan complies with the City’s guidelines and the State NPDES Permit. Stormwater treatment controls required under this condition may be required to enter into a formal recorded Maintenance Agreement with the City.

Hydromodification Management =

Postconstruction stormwater runoff shall drain to approved permanent Hydromodification Management (HM) controls to mitigate increases in peak runoff flow and increased runoff volume. Projects that will decrease impervious surface area in comparison to the preproject condition are not subject to the HM requirement. Information related to this requirement, including the exemption criteria, is included in the City’s document entitled, “Hydromodification Management Plan Guidelines for Development Projects,” and the Santa Clara Valley Urban Runoff Pollution Prevention Program’s manual entitled, “C.3 Stormwater Handbook: Guidance for Implementing Stormwater Requirements for New and Redevelopment Projects.”

The City’s “Hydromodification Management Plan Guidelines for Development Projects” manual requires applicants to submit a Stormwater Management Plan, including information such as the type, location, and sizing requirements of the controls that will be installed. Include the Stormwater Management Plan with the building plan submittal. Property owners of projects that include stormwater controls constructed in accordance with this condition are required to enter into a formal recorded self-inspection and maintenance agreement with the City.

Stormwater Management Plan—Third-Party Engineer’s Certification

The Final Stormwater Management Plan must 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.

Water and Sewer Capacity Charges

Prior to issuance of any building permits and prior to approval of the parcel or final map, the applicant shall pay the water and sewer capacity fees for the development. The water and sewer capacity charges for residential connections are based on the number and type of dwelling units. Separate capacity charges apply for different types of residential categories to reflect the estimated demand of each type of connection. The water and sewer capacity charges for

nonresidential connections are based on the water meter size, building area, and building use, respectively. Credit is given for the existing site use(s) and meter size(s), as applicable.

Storm Drainage Fee

Prior to issuance of any building permits and prior to approval of the parcel or final map, the applicant shall pay the off-site storm drainage fee per Section 28.51(b) with the rates in effect at the time of payment.

Underground Services

All new and existing electric and telecommunication facilities serving the site are to be placed underground, including transformers. The undergrounding of the new and existing overhead electric and telecommunication lines is to be completed prior to issuance of a Certificate of Occupancy for any new buildings within the site. If allowed by the City, aboveground transformers, power meters, and pedestals shall be located so they are screened in the least visible location from the street or to the general public, as approved by the Community Development and Public Works Departments.

Recycled Water Use Requirement

This site is within the City's current or future recycled water service area. Recycled water use is required per the City Code for all irrigation within the City's recycled water service area.

Mountain View Green Building Code/Construction and Demolition Ordinance

If this project is subject to the requirements of the Mountain View Green Building Code, a Construction and Demolition Waste Management Plan shall be submitted with the building permit application and approved by the Public Works Solid Waste and Recycling Division prior to issuance of a building permit. A Final Construction and Demolition Waste Management Plan shall be submitted and approved prior to final inspection.

Green Building – Residential New Construction

The project is required to meet the mandatory measures of the California Green Building Standards Code and meet the intent of the applicable GreenPoint Rated points. All mandatory prerequisite points and minimum point totals per category to attain GreenPoint Rated status must be achieved, unless specific point substitutions or exceptions are approved by the Community Development Department. Formal project registration and certification through Build It Green is not required for compliance with the Mountain View Green Building Code (MVGBC). The project is also required to comply with Title 24, Part 6.

Landscaping

Detailed landscape plans encompassing on- and off-site plantable areas out to the street curb must be included in building permit drawings. Minimum plant sizes are flats or one-gallon containers for ground cover, five-gallon for shrubs, and 24" box for trees. The drawings must be approved by the Zoning Administrator prior to building permit issuance and implemented prior to occupancy. All plans should be prepared by a licensed Landscape Architect and should comply with the City's Landscape Guidelines, including the Water Conservation in Landscaping Regulations (forms are available online at www.mountainview.gov/planningforms). Additional

landscaping materials or modifications may be required by the Planning Division at final inspection to ensure adequate planting coverage and/or screening.

4.15.4 Significance Criteria

The thresholds used to determine the significance of impacts related to utilities and service systems are based on Appendix G of the *CEQA Guidelines*. Implementation of the Project could have a significant impact on the environment if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- 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.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Approach to Analysis

Potential impacts to utilities are discussed based on the CEQA Significance Thresholds included in Appendix G of the CEQA Guidelines as listed above. Impacts are evaluated largely based on information included in the City's General Plan, the City's 2020 UWMP, the City's Water System Master Plan, the City's Sewer System Management Plan, and information from CalRecycle. A water supply assessment was also prepared for the HEU by Schaaf & Wheeler on behalf of the City of Mountain View (**Appendix D**).

After considering the implementation of the proposed project as described in Chapter 3, *Project Description*, and compliance with the required regulatory requirements, the environmental analysis below identifies if the defined significance thresholds would be exceeded and, therefore, a significant impact would occur.

4.15.5 Impacts of the Project

Impact UTL-1: Implementation of the HEU would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (*Less than Significant with Mitigation*)

The HEU would accommodate additional residential development in the City and a related increase in demand for water, wastewater treatment, stormwater drainage, electric power, natural

gas, and telecommunications facilities. Residential developers are responsible for constructing water, sewer, and storm drainage improvements on new housing sites. Where a project has off-site impacts, such as increased stormwater runoff, increased sewer load or added congestion at a nearby intersection, additional developer expenses may be necessary to mitigate impacts. The contractor is required to make site improvements before constructing a building on the property. Site improvements can include connections to existing utility systems, rough grading, and installation of water and sewer lines. Extension of this infrastructure would likely occur in existing adjacent roadways and, aside from short-term construction disturbance, would not result in any unusual or further environmental impacts than identified elsewhere in this Draft EIR for overall construction activity associated with the HEU. ADUs would require minor tie-ins to the existing on-site utility systems served by the main dwelling unit, the construction of which would not result in significant environmental impacts due to the small scale of ground disturbance.

The scope of the City's utility master plans includes development anticipated as a result of the City's General Plan land use strategy, and recent certified Environmental Impact Reports and Precise Plans. This development includes General Plan growth estimates, plus growth affiliated with the North Bayshore, El Camino Real, East Whisman and San Antonio Precise Plans and approved recent Rezoning and General Plan Amendment projects, as these all have associated utility impact studies. As such, utility infrastructure and improvements as part of HEU for pipeline projects and opportunity sites that do not require rezoning would be included in the scope of the City's utility master plans. However, development potential at the housing sites identified in the HEU for rezoning were not included in these projections.

The City is currently preparing utilities studies for the water, sewer, and stormwater drainage systems for the areas proposed for rezoning to identify needed improvements, provide cost estimates associated with the needed improvements, establish funding mechanism(s), and/or incorporate into the City's Capital Improvement Program (CIP). See the discussions below for anticipated infrastructure requirements for each utility system associated with the proposed multifamily housing sites.

Water Distribution

Projects developed as a result of the HEU are located within urbanized portions of the City and would connect to existing water City water infrastructure. Prior to issuance of any building permits and prior to approval of the parcel or final map, subsequent projects would be required to pay water capacity fees for the development in accordance with City Standard Condition of Approval (Water and Sewer Capacity Charges). The capacity charges for residential connections are based on the number and type of dwelling units. The City also requires that redevelopment project applicants evaluate the off-site capacity impacts of their project through an engineering study and commit to providing off-site improvements as part of the project approval process. This is the primary means through which capacity deficiencies resulting from redevelopment are addressed, and **Mitigation Measure UTL-1, Fair-Share Contributions Toward Utility Improvements**, would ensure that subsequent development projects contribute their fair share toward CIPs identified by the City, based on the project's determined contribution. Construction as a result of any necessary water system capacity improvements would be temporary and within

existing rights of way, and no unusual significant environmental impact would be anticipated due to construction activity.

Wastewater Conveyance

Projects developed as a result of the HEU are located within urbanized portions of the City and would connect to existing water City sanitary sewer infrastructure. Prior to issuance of any building permits and prior to approval of the parcel or final map, subsequent projects would be required to pay sewer capacity fees for the development in accordance with City Standard Condition of Approval (Water and Sewer Capacity Charges). The capacity charges for residential connections are based on the number and type of dwelling units. The City also requires that redevelopment project applicants evaluate the off-site capacity impacts of their project through an engineering study and commit to providing off-site improvements as part of the project approval process. This is the primary means through which sewer system capacity deficiencies resulting from redevelopment are addressed. Mitigation Measure UTL-1, Fair-Share Contributions Toward Utility Improvements, would ensure that subsequent development projects contribute their fair share toward CIPs identified by the City, based on the project's determined contribution. Construction as a result of any necessary sanitary sewer system capacity improvements would be temporary and within existing rights of way, and no unusual significant environmental impact would be anticipated due to construction activity.

Stormwater Drainage

Projects developed as a result of the HEU that would create or replace more than 10,000 square feet of impervious surface would be required to implement on-site stormwater treatment controls in compliance with the City's Guidelines and Provision C.3 of the MRP and mitigate increases in peak runoff flow and increased runoff volume. Final Stormwater Management Plans must be certified by a qualified third-party engineer per the City's Standard Condition of Approval (Stormwater Management Plan—Third-Party Engineer's Certification). Stormwater runoff would be treated and retained on-site prior to entering the City's stormwater system. City Standard Condition of Approval (Storm Drainage Fee) also requires that project applicants shall pay the off-site storm drainage fee per City Code Section 28.51(b) for the construction of storm drainage facilities to serve the drainage needs of the City. Mitigation Measure UTL-1 would also ensure that subsequent development projects contribute their fair share toward CIPs identified by the City, based on the project's determined contribution. Construction of any necessary on- and offsite stormwater drainage infrastructure would be temporary and within existing rights of way, and no unusual significant environmental impact would be anticipated due to construction activity.

Other Utilities

New meter and service connections for electricity and telecommunications services would be coordinated with the provider at the time new development is proposed. All new and existing electric and telecommunication lines serving the sites would be placed underground, including transformers, as required by City Standard Condition of Approval (Underground Services). Construction of the undergrounding of the overhead electric and telecommunication lines would be temporary and within existing rights of way, and no unusual significant environmental impact would be anticipated due to construction activity. Because of the developed, urbanized nature of

the City, and existing and that no expansion of related facilities would be necessary to serve development projects as a result of the HEU.

As detailed in the Regulatory Setting, the City of Mountain View has adopted Reach Codes that include a requirement for all buildings seeking building permits after December 9, 2020 to be “all-electric buildings.” An “all-electric” building as defined in Section 9.250 of Ordinance 2487 is a building that has no natural gas or propane plumbing installed within the building and that uses electricity as the source of energy for its space conditioning, water heating (including pools and spas), cooking and clothes drying appliances. The Reach Codes include a requirement for all multi-family new construction to all-electric buildings with no natural gas infrastructure for space conditioning, water heating, cooking or other appliances. This goes beyond the requirements in the 2022 Update to the Title 24 standards that will go into effect on January 1, 2023 and establish electric-ready requirements in new homes, but do not explicitly prohibit natural gas. As a result, no impacts related to construction of natural gas infrastructure would occur.

Conclusion

Overall, the potential improvements or extension of utility infrastructure to serve development as a result of the HEU would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this Draft EIR for overall construction activity for the project. As such, the implementation of the HEU would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Mitigation Measure UTL-1 would ensure that subsequent development projects contribute their fair share toward CIPs identified by the City, based on the project’s determined contribution. The impact would be **less than significant**.

Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements

Subsequent development projects shall contribute the fair share amount identified by the City of Mountain View Public Works Department to fund capital improvements to the water, sanitary sewer, and stormwater drainage systems prior to issuance of a building permit.

Significance after Mitigation: Less than Significant

Impact UTL-2: Implementation of the HEU would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (*Less than Significant*)

Implementation of the HEU would result in increased demand for potable water. The scope of the City’s 2020 UWMP includes development anticipated as a result of Mountain View’s General Plan land use strategy, and recent certified Environmental Impact Reports and Precise Plans. This development includes General Plan growth estimates, plus growth affiliated with the North Bayshore, El Camino Real, East Whisman and San Antonio Precise Plans and approved recent

Rezoning and General Plan Amendment projects. However, the total number of dwelling units exceed the previously anticipated housing units studied in the City's 2020 UWMP by approximately 11,100 dwelling units. As such, a water supply assessment was prepared for the HEU by Schaaf & Wheeler on behalf of the City of Mountain View (Appendix D).

The total water demand projected for the HEU at build-out beyond what was included in the City's 2020 UWMP was estimated to be approximately 1.1 mgd or 1,244 AFY³ and represents the estimated increase beyond the City's 2020 UWMP as a result of the HEU, including the water demands of the residential buildings and surrounding landscaping. These estimates are conservative as they do not account for existing water use credits for redevelopment sites, on-site water conservation efforts such as landscaping with low water use plants, the use of recycled water for irrigation, dual plumbing and low flow sanitary fixtures, and technologies associated with LEED construction. During dry years, the irrigation demand for projects developed under the HEU can be expected to increase by 5%, while the indoor demands remain constant. However, during dry years, landscape irrigation is considered a non-essential use and restriction is prioritized over indoor usage. Development under the HEU will be subject to staged water use restrictions associated with the City's Water Shortage Contingency Plan.

The WSA found that the City of Mountain View water system has sufficient existing water supply to fully support development under the HEU above what was considered in the 2020 UWMP under normal, single dry, or multiple dry water years. Under normal conditions, the City is not projected to experience supply shortfalls. Shortfalls of up to 20% are projected for single dry-years and for multiple dry-years. Under all conditions, the City may need to impose water conservation measures, per Mountain View Municipal Code, Section 35.28, to reduce demand. Action Stage 1 calls for a demand reduction of up to 10% through increased public education and outreach to encourage voluntary reduction in water use. Action Stage 2 calls for a demand reduction of up to 25% through several mandatory water use restrictions and requirements, such as prohibiting at-home vehicle washing, except by bucket, and requiring water-conserving restaurant dishwashing spray valves. Stage 3 calls for a demand reduction of up to 40% through enforcements of filling swimming pools, requiring car washes to recirculate, and a more stringent requirement to fix leaks. Stage 4 calls for a demand reduction of greater than 40% by restricting all outdoor irrigation and additional, more stringent requirements for fixing leaks. The implementation of these measures would result in supply remaining sufficient for the projected future demand even in multiple dry-years.

Additionally, depending on the final outcome and implementation of the State Water Resources Control Board's *Bay Delta Water Quality Control Plan*, Mountain View's primary water supply from the San Francisco Public Utilities Commission may be reduced significantly during dry years (possibly up to 59.5 percent). Although the status of the Bay Delta Plan is still undetermined, Mountain View plans to utilize local groundwater wells as needed during dry years in order to limit cutbacks to 20 percent, and implement the City's Water Shortage Contingency Plan to reduce water demand during droughts (Schaff & Wheeler, 2022).

³ Based on the multifamily residential unit duty factor of 100 gpd for 11,100 units.

Projects developed as a result of the HEU would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. For outdoor water use, the CALGreen Code requires that irrigation controllers be weather- or soil moisture-based and automatically account for rainfall, or be attached to a rainfall sensor. Additionally, the projects would be required to comply with Standard Condition of Approval (Landscaping) and the City of Mountain View Water Conservation in Landscaping Regulations and the MVGBC which include water conservation requirements. Under the MVGBC, new buildings must use water-efficient plumbing fixtures or demonstrate a 20 percent reduction from a baseline water use. City Standard Conditions of Approval also require projects to install plants with low water requirements and include efficient irrigation systems in landscape design. Implementation of water conservation and efficiency measures would minimize the potable water demand generated. Projects developed within the North Bayshore Precise Plan area would also be required to use recycled water for irrigation and projects developed within the East Whisman Precise Plan area would be required to construct recycled water compatible irrigation systems for connection to future extension of the recycled water system to the area, which would also reduce the potable water demand.

In addition, SB 221 applies to proposed residential developments of over 500 dwelling units and requires that the water supplier provide a written verification that the water supply for the project is sufficient, prior to issuance of the final permits. Because the proposed HEU anticipates up to approximately 16,650 multifamily residential units, individual projects may be subject to the requirements of SB 221 (Government Code section 66473.7) and a verification of sufficient water supply (SB 221) report would be required prior to final approvals for projects with 500 or more residential units.

Overall, because the WSA determined that the City of Mountain View water system has sufficient existing water supply to fully support development under the HEU above what was considered in the 2020 UWMP under normal, single dry, or multiple dry water years and development under the HEU would minimize its water demand through conservation and efficiency measures, the impact related to water supply would be **less than significant**.

Mitigation: None required

Impact UTL-3: Implementation of the HEU would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (*Less than Significant*)

Implementation of the HEU would result in an increase in population and thus an increased demand for wastewater treatment. The RWQCP has a design capacity of 39 mgd, and the City has an annual wastewater capacity allotment of 15.1 mgd at the plant. The City's 2020 wastewater generation was 6.88 mgd (City of Mountain View, 2021). Approximately 15,000 new multifamily dwelling units could generate approximately 1.4 mgd of wastewater.⁴ The sites identified as part

⁴ Assumes a sewer duty factor of 90 gpd per unit for multifamily residential uses.

of the HEU's housing sites inventory would account for approximately 17 percent of the unused capacity at the RWQCP. Additionally, projects would be subject to sewer capacity fees and City Standard Conditions of Approval (Water and Sewer Capacity Charges) to address new demand. Therefore, implementation of the HEU is not expected to result in wastewater treatment capacity issues at the RWQCP.

Development under the HEU would be required to comply with the CALGreen Code, which requires that new construction use high-efficiency plumbing fixtures, such as high-efficiency toilets, urinals, showerheads, and faucet fixtures. Additionally, the projects would be required to comply with the MVGBC which include water conservation requirements. Under the MVGBC, new buildings must use water-efficient plumbing fixtures or demonstrate a 20 percent reduction from a baseline water use. Implementation of water conservation and efficiency measures would reduce the wastewater generated.

Since the RWQCP would have adequate capacity to serve the proposed HEU demand, implementation of the HEU would not result in wastewater treatment capacity issues. This impact would be **less than significant**.

Mitigation: None required.

Impact UTL-4: Implementation of the HEU 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. (*Less than Significant*)

While no specific development proposals are directly associated with the HEU, theoretical development would generate solid waste during both construction and operation. During construction, construction-related debris would be generated. During operation, the additional residential uses would result in an increase in the demand for solid waste services.

Construction

As described in Section 4.15.3, *Regulatory Setting*, the City of Mountain View requires development projects to achieve at least 65 percent diversion under the CALGreen Code and create and maintain a construction waste management plan consistent with City Standard Condition of Approval (Mountain View Green Building Code/Construction and Demolition Ordinance). The diversion requirement may be met through direct facility recycling, reuse of the materials on site, or donation to reuse and salvage businesses. The remaining residue from the materials that could not be recovered would be landfilled. The Kirby Canyon Landfill serves the City and accepts mixed construction and demolition waste, and has an estimated 16,191,600 cubic yards of remaining capacity (22,668,240 tons) and an expected closure date of 2059. Construction of development projects under the HEU is not expected to generate substantial amounts of solid waste during construction relative to the remaining capacity of the Kirby Canyon landfill. Therefore, construction associated with development under the HEU would not generate solid waste in excess of local infrastructure and would not impair the attainment of state-level or local waste reduction goals. This impact would be **less than significant**.

Operation

The HEU could provide for development of up to approximately 15,000 new housing units in the City through 2031 which would generate solid waste. Of the total units it's assumed that approximately 1,400 units would be enabled by changes in development capacity via rezoning. The balance of approximately 13,600 units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. In addition, the analysis in this EIR also considers approximately 2,700 units beyond 2031 that would be enabled by changes in development capacity via rezoning. Using the estimated number of residents (calculated in Section 4.12, *Population and Housing*) and the average disposal rate for the City in 2020, new residential uses would generate approximately 48 tons of waste per day (17,520 tons per year).⁵ New residential uses enabled by changes in development capacity via rezoning would generate up to approximately 13 tons of waste per day (4,745 tons per year).⁶ The Kirby Canyon Landfill accepts approximately 2,600 tons per day, has approximately 16,191,600 cubic yards of remaining capacity (22,668,240 tons), and has an expected closure date of 2059. The daily solid waste estimates associated with development enabled by changes in development capacity under the HEU would account for less than 0.5 percent of the permitted daily capacity of the Kirby Canyon Landfill and the daily solid waste estimates associated with all 15,000 units would account for approximately 1.8 percent, and as such implementation of the HEU would not generate substantial amounts of solid waste during operation relative to the capacity of local infrastructure.

Projects developed as a result of the HEU would be required to comply with existing solid waste reduction requirements, including applicable federal, State and local solid waste statutes and regulations during operation. Compliance with existing policies and regulations, including the CALGreen building and State recycling and organic material diversion requirements, would reduce the non-renewable sources of solid waste, and minimize the solid waste disposal requirements of HEU implementation. Therefore, operation under the HEU would not generate solid waste in excess of the local infrastructure, and would not impair the attainment of State-level or local waste reduction goals. This impact would be **less than significant**.

Mitigation: None required.

Impact UTL-5: Implementation of the HEU would not Comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (*Less than Significant*)

During construction and operation associated with development under the HEU, development projects would be required to comply with federal, State, and local solid waste standards identified in Section 3.16.3, *Regulatory Setting*, such as the California Integrated Waste Management Act, AB 939, the CALGreen Code, AB 341 and AB 1826, and SB 1383. As previously discussed, projects developed as a result of the HEU would be required to be in compliance with the City's Green Building Code and Construction and Demolition Ordinance, as required by Standard Condition of

⁵ Solid waste generation = 30,000 residents x 3.2 pounds per resident per day = 96,000 pounds per day (48 tons per day)

⁶ Solid waste generation = 8,200 residents x 3.2 pounds per resident per day = 26,240 pounds per day (13.12 tons per day)

Approval (Mountain View Green Building Code/Construction and Demolition Ordinance). Recology Mountain View oversees the collection, transfer, and disposal of residential garbage, recycling, and organics in the City, assisting with keeping the City compliant with State-mandated recycling requirements (AB 341, AB 1826 and SB 1383), including recycling of organics, and in support of the high recycling rate of the City and the Zero Waste Plan goals. As a result, development under the HEU would not conflict with applicable waste reduction policies. Therefore, the impact of the HEU regarding compliance with solid waste regulations would be **less than significant**.

Mitigation: None required.

4.15.6 Cumulative Impacts

This section presents an analysis of the cumulative effects of the HEU in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to utilities and service systems could occur if the incremental impacts of the HEU combined with the incremental impacts of one or more cumulative projects.

The geographic scope for cumulative effects on utilities and service systems is the service area for utility providers.

Impact UTL-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on utility infrastructure. (*Less than Significant with Mitigation*)

Implementation of the HEU, when combined with other past, present, or reasonably foreseeable development described in Section 4.0.3, *Cumulative Impacts*, would increase the demand for water, wastewater conveyance and treatment, storm drainage, electrical and telecommunications systems infrastructure. Cumulative development would be subject to applicable development and utilities fees that would be collected by the City, construction of system improvements, and fair-share contributions to address the new utility system demand. The potential improvement or extension of utility infrastructure to serve cumulative development would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this DEIR for overall construction activity associated with future development as a result of the HEU. For these reasons, and because changes proposed to utilities infrastructure as part of future developments will be subject to review and permitting requirements, and Mitigation Measure UTL-1, the HEU would not contribute considerably to a significant cumulative impact in this regard, and impacts would be less than significant.

Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements. (See Impact UTL-1 above)

Significance after Mitigation: Less than Significant

Impact UTL-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on water supply. (*Less than Significant*)

As noted under Impact UTL-2, the scope of the City's 2020 UWMP includes development anticipated as a result of Mountain View's General Plan land use strategy, and recent certified Environmental Impact Reports and Precise Plans. This development includes General Plan growth estimates, plus growth affiliated with the North Bayshore, El Camino Real, East Whisman and San Antonio Precise Plans and approved recent Rezoning and General Plan Amendment projects. The WSA prepared for the HEU determined that the City's water system has sufficient existing water supply to fully support development under the HEU above what was considered in the 2020 UWMP under normal, single dry, or multiple dry water years (Schaaf & Wheeler, 2022). Therefore, implementation of the HEU would not contribute considerable to a cumulative impact on water supply. In dry years, the City expects to manage projected water supply shortfalls via its Water Shortage Contingency Plan and cumulative development projects would be subject to the same demand reduction measures. Depending on the final outcome and implementation of the State Water Resources Control Board's Bay Delta Water Quality Control Plan, Mountain View's primary water supply from the San Francisco Public Utilities Commission may be reduced significantly during dry years (possibly up to 59.5 percent). Although the status of the Bay Delta Plan is still undetermined, Mountain View plans to utilize local groundwater wells as needed during dry years in order to limit cutbacks to 20 percent, and implement the City's Water Shortage Contingency Plan to reduce water demand during droughts (Schaaf & Wheeler, 2022).

.Similar to the HEU, cumulative projects and projects developed would be required to comply with the CALGreen Code, City Standard Conditions of Approval, the City of Mountain View Water Conservation in Landscaping Regulations, and the MVGBC which include water conservation and efficiency requirements that would minimize the potable water demand generated. Therefore, the HEU's cumulative water supply impacts would be **less than significant**.

Mitigation: None required

Impact UTL-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on wastewater treatment capacity. (*Less than Significant*)

Wastewater generation as a result of implementation of the HEU could combine with cumulative development in the City, as the potential population increase would also generate wastewater that could be treated at the RWQCP. As discussed for Impact UTL-3, the City has a wastewater capacity allotment of 15.1 mgd at the RWQCP. Approximately 15,000 new multifamily dwelling units developed as a result of the HEU could generate approximately 1.4 mgd of wastewater, accounting for approximately 17 percent of the City's unused capacity at the RWQCP. Of the total units it's assumed that approximately 4,100 units would be enabled by changes in development capacity via rezoning. The balance of units represents development that is already permitted under the City's adopted General Plan, zoning, and Precise Plans. As such, implementation of the HEU would result in a cumulative contribution to wastewater generation of approximately 0.4 mgd. The General Plan

EIR, which includes planned growth under the General Plan, projected that the City's wastewater flow in 2030 would be 13.78 mgd, or 91 percent of the City's current capacity (City of Mountain View, 2012b). However, it is noted that the City's total wastewater generation in 2020 of 6.88 mgd was less than that of the existing (2010) rate of 8.58 mgd studied in the General Plan EIR.

The City's agreement with the City of Palo Alto states that, when Mountain View reaches 80 percent of the 15.1 mgd allowed by contract (approximately 12.08 mgd), the City may be asked to assist in future plant expansion. The projected wastewater flow from estimated 2030 development associated with the City's General Plan would reach 80 percent of the capacity limit and that level necessitates a study. If these projected flows are realized, the City would be required to perform an engineering study per the Basic Agreement (City of Mountain View, 2012b). While projected 2030 General Plan flows are not likely to be realized considering the 2020 wastewater generation rate for the City, the Basic Agreement outlines the framework to ensure that adequate wastewater treatment capacity is available.

Additionally, in the event that a city requires additional capacity in excess of the proportionate capacity allocated, and the additional capacity is not then being used by other partner agencies, the city requiring additional capacity may rent or purchase from another agency the additional capacity rights. This additional capacity may be transferred at the discretion of the governing body of other agencies and upon agreement of all agencies (City of Mountain View, 2012b).

Based on the approximately 8.22 mgd average daily excess capacity allocation for the City at the RWQCP and the HEU's relatively minimal contribution to cumulative demand (0.4 mgd), the implementation of the HEU would not contribute considerably to a significant cumulative impact on wastewater treatment capacity.

Mitigation: None required.

Impact UTL-4.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on solid waste. (*Less than Significant*)

Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would increase the generation of solid waste. The Kirby Canyon landfill has an expected closure date of 2059. As with projects developed as a result of the HEU, cumulative development projects would be required to comply with federal, state, and local solid waste standards, including waste diversion during construction, including at least 65 percent construction and demolition waste diversion, and during operation, including recycling and organic material diversion requirements. As such, non-renewable sources of solid waste and the solid waste disposal requirements of cumulative development would be reduced. Therefore, when considered in the cumulative context, the proposed HEU's solid waste-related impacts would not be cumulatively considerable. Cumulative impacts would, therefore, be **less than significant**.

Mitigation: None required.

4.15.7 Summary of Utilities and Service Systems Impacts

Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
Impact UTL-1: Implementation of the HEU would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Potentially Significant	Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements	Less than Significant
Impact UTL-2: Implementation of the HEU would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Less than Significant	None required	-
Impact UTL-3: Implementation of the HEU would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant	None required	-
Impact UTL-4: Implementation of the HEU 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.	Less than Significant	None required	-
Impact UTL-5: Implementation of the HEU would not Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Less than Significant	None required	-
Impact UTL-1.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on utility infrastructure.	Potentially Significant	Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements	Less than Significant
Impact UTL-2.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on water supply.	Less than Significant	None required	-
Impact UTL-3.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on wastewater treatment capacity.	Less than Significant	None required	-
Impact UTL-4.CU: Implementation of the HEU, when combined with other past, present, or reasonably foreseeable projects, would not contribute considerably to cumulative impacts on solid waste.	Less than Significant	None required	-

4.15.8 References

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4.16 Effects Found Not to Be Significant

4.16.1 Introduction

This section presents information regarding impacts of the Project for environmental topic areas that were determined to have no impact by the City of Mountain View. According to CEQA *Guidelines* Section 15128, an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.

Effects of the Project on the following environmental topic areas were found not to be significant during the EIR process: Agriculture and Forest Resources; Mineral Resources; and Wildfire. The following presents a brief summary of Project effects found not to be significant, including a discussion of reasons they would not be significant.

4.16.2 Agriculture and Forestry Resources

The California Department of Conservation, Division of Land Resource Protection, has established the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the State’s farmland to and from agricultural use. Four categories of farmland – Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance – are considered valuable. The bulk of the City of Mountain View is identified as “Urban and Built-Up Land” by the FMMP and is surrounded by lands designated as Urban and Built-Up Land. The areas not identified as Urban and Built-Up Land are located in the North Bayshore area and are designated as “Other Land”. According to the FMMP map for Santa Clara County, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance designated on any portion of the planning area for the HEU (DOC, 2016). Thus, the HEU would have no impact on important farmland.

The City of Mountain View’s Zoning Code provides one agricultural designation, Agriculture (A, AW). However, there are only four of these designations in the City, one in the North Bayshore area, one in the Grant Road/Sylvan Park area, and two in the Moffett/Whisman Road area. None of these agricultural zoning designations fall within an area where housing sites are identified as part of the HEU. Therefore, the HEU would have no impact on these agricultural designated zones (City of Mountain View, 2018a).

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to designate agricultural preserves and enter into contracts with private landowners for restricting specific parcels of land to agricultural, or related open space use. The City of Mountain View does not contain an area subject to an agricultural preserve or a Williamson Act Contract (Santa Clara County, 2022). Thus, implementation of the HEU would not interact with or conflict with existing agricultural zoning or a Williamson Act contract, and would have no impact.

With respect to forestry resources, no existing timber harvest uses are located on or in the vicinity of the City. No areas of the City are designated or zoned for such use. As such, implementation of

the HEU would not result in the loss of forest land or conversion of forest land to non-forest uses, and would have no impact on forest land or timberland.

Based on these considerations, implementation of the HEU would not result in conversion of farmland, on-site or off-site, to a non-agricultural use, nor would it result in conversion of forest land to non-forest land. Therefore, no impact to agricultural and forestry resources would occur. Accordingly, this issue was not subjected to detailed analysis in the EIR.

4.16.3 Mineral Resources

Initial Statewide mapping of aggregate resources included a small area within the southern boundary of Mountain View along Stevens Creek being classified as MRZ-3, “Areas containing mineral deposits the significance of which cannot be evaluated from the available data.” However, based on subsequent mapping by the State of California for suitability of use as construction materials, it was determined that no minerals or aggregate resources of Statewide importance are located within the City. There are also no natural gas, oil, or geothermal resources identified in or adjacent to the City (City of Mountain View, 2012).

There are no known significant mineral resources in the City of Mountain View or on the potential HEU housing sites. Additionally, there are no areas zoned as mineral resource zones by the City’s General Plan (City of Mountain View, 2018a & 2018b). Implementation of the HEU would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and 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. As a result, the HEU would not interfere with any mineral extraction operations and would not result in the loss of land designated for mineral resources. Therefore, no impact to mineral resources would occur. Accordingly, this issue was not subjected to detailed analysis in the EIR.

4.16.4 Wildfire

Impacts related to exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires are addressed in Section 4.8, *Hazards and Hazardous Materials*.

In accordance with California Public Resource Code Section 4201-4204 and Government Code Section 51175-51189, the California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), represent the risks associated with wildland fires. The City of Mountain View is not located in or near a State Responsibility Area (SRA) or lands classified as very high fire severity zones (VHFSZ) (CAL FIRE, 2022). The southern portion of the City of Mountain View is located at the edge of an area that has been mapped as a Wildland-Urban interface fire hazard area (ABAG, 2022). However, the majority of the City is highly developed with residential, commercial, office/industrial, and mixed use areas, therefore there is only sparse vegetation mainly concentrated at various parks.

Therefore, no impact would occur with regard to wildfire. Accordingly, this issue was not subjected to detailed analysis in the EIR.

4.16.5 References

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CHAPTER 5

Alternatives to the Project

Pursuant to the provisions of CEQA, this chapter is provided to describe and evaluate alternatives to the Project, including one or more “No Project” alternatives, and to identify one or more “environmentally superior” alternatives. The primary purpose of this section is to provide decision-makers and the public with a qualitative review of alternatives to the Project that eliminate or substantially reduce any identified adverse environmental impacts while, at the same time, attaining most of the basic objectives of the Project.

The focus of the alternatives analysis in this chapter is on assessing the extent to which the Project alternatives would result in eliminating or reducing impacts identified as significant and unavoidable in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*. Project impacts that would be less than significant with and without mitigation as identified in Chapter 4 are also considered, but to a lesser extent.

The Notice of Preparation (NOP) for the EIR was circulated on February 4, 2022 and a scoping meeting was held on February 24, 2022. The NOP and the comments received during the public comment period can be found in **Appendix A** of this EIR. Comments relating to alternatives received during the NOP comment period include a request by the Santa Clara Valley Transportation Authority (VTA) to analyze an alternative that would assume higher densities on housing opportunity sites through the reduction of off-site parking ratios. Such reduced ratios were suggested to be accomplished by either reducing parking minimums, applying parking maximums, or both in some or all portions of the City. The environmental effects of the reduced parking ratios and higher densities on land use, walk, bike and transit mode shares, and vehicle miles traveled (VMT) were specifically requested to be analyzed under this proposed alternative.

5.1 CEQA Requirements

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed project, and evaluate the comparative merits of the alternatives (*CEQA Guidelines* Section 15126.6(a), (d)). The “range of alternatives” is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to foster informed decision-making and public participation (Section 15126.6(a), (f)).

The range of alternatives shall include alternatives that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project (*CEQA Guidelines* Section 15126.6(a)-(c)). CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a

reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. In addition, the following may be taken into consideration when assessing the feasibility of alternatives: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and the ability of the proponent to attain site control (Section 15126.6(f)(1)). The EIR should briefly describe the rationale for selecting the alternatives to be discussed and identify any alternatives that were rejected as infeasible, briefly explaining the reasons (15126.6(c)).

The description or evaluation of alternatives does not need to be exhaustive, and an EIR need not consider alternatives for which the effects cannot be reasonably determined and for which implementation is remote or speculative. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (*CEQA Guidelines* Section 15126.6(d)).

The “no project” alternative must be evaluated. This analysis shall discuss the existing conditions, as well as what could 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 (*CEQA Guidelines* Section 15126.6(e)(2)).

CEQA also requires that an environmentally superior alternative be selected from among the alternatives. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. When the “no project” alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (*CEQA Guidelines* Section 15126.6(e)(2)).

5.1.1 Project Objectives

CEQA Guidelines Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

“A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.”

The primary purpose of the HEU is to comply with the requirements of State law by analyzing existing and projected housing needs, and updating goals, policies, objectives, and implementation programs for the preservation, improvement, and development of housing. The proposed Project is intended to ensure the City’s conformance with State housing requirements and seeks to:

- Protect existing housing;
- Encourage new housing for households at all income levels and for households with a range of diverse housing needs;
- Remove undue constraints on new housing development, including for affordable housing development;

- Affirmatively further fair housing; and
- Identify specific sites that could accommodate required housing units to meet the City’s RHNA.

5.1.2 Elimination and/or Reduction of Identified Significant Impacts

CEQA *Guidelines* § 15126.6(b) states that “Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”

Potentially significant environmental impacts that would result from implementation of the HEU are evaluated in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR. With implementation of mitigation measures identified for each resource area significantly impacted, many of the potentially significant impacts resulting from the HEU would be reduced to a less-than-significant level. The Project impacts listed below would remain significant and unavoidable even after mitigation, and the alternatives evaluated in this EIR have been selected because they are anticipated to reduce and/or eliminate one or more of these significant impacts.

Air Quality Impact AIR-2: Implementation of the HEU 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. (*Significant and Unavoidable with Mitigation*)

5.2 Factors in the Selection of Alternatives

The nature and scope of the range of alternatives to be discussed is governed by the “rule of reason.” The CEQA *Guidelines* recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed (Section 15126.6[c]). This alternatives analysis considers the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the proposed project;
- The extent to which the alternative would avoid or lessen the identified significant, or less-than-significant with mitigation, environmental effects of the proposed project;
- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which an alternative contributes to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA *Guidelines* to consider a “No-Project” alternative, and to identify an “environmentally superior” alternative in addition to the no-project alternative (Section 15126.6[e]).

5.2.1 Alternatives Considered but Rejected from Further Evaluation

A number of alternatives were considered for analysis and determined not to be feasible for the reasons explained in this section. These alternatives were not carried forward for analysis in the EIR.

Off-Site Alternative

The primary objective of the Housing Element Update is to ensure the City's conformance with State law. There would be no way to meet this objective with an alternative that did not focus on the City itself, and therefore this alternative was not analyzed further.

Additional Housing Sites

As part of the planning and community engagement process, additional sites were considered for rezoning for multifamily housing and inclusion as part of the HEU. These sites were ultimately eliminated from consideration for the following reasons:

- Non-historic churches and other private non-profit institutions in residential (R) zoning districts were considered as a part of the housing sites inventory. City staff did not receive any responses from the 28 letters sent to properties identified as non-historic churches in R Districts. Although these sites have partnered with the City on temporary housing solutions, particularly during the COVID-19 pandemic, and are organizations with community-serving missions, additional policy development and outreach are necessary to determine the site-by-site information needed (e.g., number of units, income level of units, etc.) to be included in the housing sites inventory. However, City staff has included a program in the Housing Plan (1.2 Community Sites for Housing) to evaluate changes to the City Code to allow for affordable residential uses on these sites to respond to Council interest in reviewing such sites.
- Non-historic Government sites were considered as a part of the housing sites inventory. City staff met with representatives from the California Department of Motor Vehicles (DMV), VTA, and the U.S. National Aeronautics and Space Administration (NASA). The DMV expressed concerns about adding housing to a site on Showers Drive, including concerns about compatibility with existing uses and ongoing obligations in operations of the sites. NASA referred City staff to U.S. Army documents studying potential future uses on vacant land near the Moffett Boulevard/U.S. 101 interchange. The Army has no interest in building residential in that area. VTA was open to reimagining the bus yard on North Shoreline Boulevard to accommodate a mix of uses but did not see it as a viable project in the next eight years. Due to lack of property owner interest because of existing uses or constraints that would not result in housing development in the next eight years that could be counted toward the City's RHNA, these sites were not considered.
- Areas along South Drive around El Camino Hospital were considered as a part of the housing sites inventory. Based on preliminary discussions with El Camino Hospital, there is limited potential for residential uses along South Drive. The properties are owned by multiple owners, occupied with multiple long-term practitioners, and have existing flooding hazard concerns. In addition, representatives of El Camino Hospital were concerned with compatibility and traffic issues.

- A future Downtown Precise Plan Update may have the opportunity to include more housing. However, significant analysis and outreach will be required before it can be considered which will not meet the time frame of the Housing Element.
- West Terra Bella may have some opportunity sites, but the Vision Plan was rejected by Council in 2019 in favor of a Precise Plan and/or a comprehensive Master Plan. Based on the lack of clear guidance for the area's density and intensity and the need for significant outreach, development of a plan, and CEQA review, it would not meet the timeline for the Housing Element.

Reduced Parking Ratios

As noted above, VTA requested that the EIR analyze an alternative that would assume higher densities on housing opportunity sites through the reduction of off-site parking ratios. Such reduced ratios were suggested to be accomplished by either reducing parking minimums, applying parking maximums, or both in some or all portions of the City. Many of the proposed housing sites already have parking maximums and no minimums (e.g., sites within the North Bayshore and East Whisman Precise Plan areas). The programs in the HEU include a measure to review parking standards in at least one zoning district. In general, parking is not a constraint on density. Developments regularly meet their maximum densities while providing required parking. However, it may be a constraint on costs, which is why the program was provided.

5.2.2 Alternatives to Lessen Identified Significant Effects

As noted in several of the topical sections of Chapter 4 of this EIR, one significant and unavoidable effect was identified that would result from the HEU's implementation related to air quality, as listed above in Section 5.1.2. CEQA Guidelines Section 15126.6(b) notes that a principal purpose of alternatives is to identify alternatives to a project or its location that are capable of avoiding or substantially lessening the significant effects of a project. To that end, the City contemplated feasible alternatives that could avoid or lessen the effects related to air quality.

5.3 Description of Alternatives Selected for Analysis

The following alternatives were selected for analysis based on the CEQA requirement for a No Project Alternative and the alternatives' ability to attain the basic objectives of the project while reducing one or more significant environmental impact. These alternatives are described in further detail and analyzed below.

- **Alternative 1: No Project.** This alternative assumes that the HEU would not be adopted and that the goals and policies within the existing Housing Element would remain unchanged. Further, the City's existing land use and zoning designations would also remain unchanged. Rezoning within portions of the City would not occur, however reasonably foreseeable development could still proceed, and residential development within the City would continue to be directed and governed in the manner that it is currently.
- **Alternative 2: Reduced Sites Alternative.** This alternative would reduce the number of opportunity sites and rezoning areas identified in the HEU and locate development and resulting construction activity farther from existing neighborhoods.

Further details on these alternatives, and an evaluation of environmental effects relative to the HEU, are provided below.

5.3.1 Alternative 1: No Project Alternative

CEQA requires consideration of the No Project Alternative, which addresses the impacts associated with not moving forward with the project. The purpose of analyzing the No Project Alternative is to allow decision-makers to compare the impacts of the project versus no project. Under the No Project Alternative, the HEU would not be adopted and the goals and policies within the City's existing Housing Element would remain unchanged. The land use and zoning designations currently in place would continue the land use decisions and development parameters that currently exist in the City.

As noted in Chapter 3, *Project Description*, the City has existing policies and sites with existing residential capacities including:

- The City has a number of housing and mixed-use projects that are approved or have an active application on file, known as “pipeline projects”, that could collectively total approximately 8,600 units by 2031.
- The City's existing precise plans, General Plan Land Use designations, and zoning permit a range of residential densities in different areas of the City that can accommodate development of multifamily housing without adjustment. A preliminary analysis estimates that there may be sufficient sites to accommodate approximately 4,700 units. Most of these sites are within Precise Plan areas, including El Camino Real, San Antonio, North Bayshore, and East Whisman, although there are sites identified for inclusion in the inventory in other areas of the City as well.
- The development of approximately 96 ADUs accessory dwelling units (ADUs) is also estimated to occur based on existing development trends.
- Programs such as the City's Below-Market-Rate Housing Program, Notice of Funding Availability (NOFA) Affordable Housing Program, Affordable Housing Impact Fee, homelessness prevention programs, Community Stabilization and Fair Rent Act (CSFRA), Tenant Relocation Assistance Ordinance (TRAO), and others also may support housing needs of residents.

Approximately 13,600 housing units could be accommodated under existing zoning and General Plan capacity in the City, which exceeds the 11,135 total housing units required in the 6th Cycle RHNA. While it is not known how many of these units would actually be realized during the planning period and at what affordability levels, the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed Project. However, since neither a housing sites inventory nor the programs necessary to implement the housing sites inventory would not be adopted under the No Project Alternative, the 6th Cycle RHNA requirements would not be met.

This alternative would not meet any of the objectives of the HEU as defined above in Section 5.2.1. The No Project Alternative would not update the City's Housing Element to comply with State-mandated housing requirements and to address the maintenance, preservation, improvement, and

development of housing in the City between 2023 and 2031. Under the No Project Alternative, the changes in development capacity via rezoning under the proposed Project, based on City and community input to increase opportunities for housing and programs to affirmatively further equity and fair housing and support existing and future residents, would not occur. While there would still be a buffer to support future compliance with no-net-loss provisions, it would be marginally less than under the Project.

5.3.2 Alternative 2: Reduced Sites Alternative

The Reduced Sites Alternative would reduce the number of opportunity sites and rezoning areas identified in the HEU and locate development and resulting construction activity farther from existing neighborhoods. Opportunity sites and rezone areas generally located outside of Precise Plan areas (i.e., within the Monta Loma/Farley/Rock Street and Springer/Cuesta/Phyllis neighborhoods) were eliminated resulting in a reduction of approximately 537 units of development capacity.

This alternative was selected for analysis because it would lessen the HEU's impacts to air quality, which were determined in Impact AIR-2 of this EIR to be significant and unavoidable, even with mitigation. By concentrating all HEU development within the Precise Plan areas and along commercial corridors, the City could meet its RHNA obligations and also reduce the identified adverse impact of the HEU related to air quality.

This alternative would meet the objectives of the HEU as defined above in Section 5.2.1, but to a lesser extent than the proposed HEU. Fewer sites would be identified under the Reduced Sites Alternative that could accommodate required housing units to meet the City's RHNA. As such, there would be lesser encouragement of new housing for households at all income levels and for households with a range of diverse housing needs and a reduction in the removal of constraints on new housing development, including for affordable housing development.

5.4 Comparative Analysis of the Alternatives

This section presents a discussion of the comparative environmental effects of each alternative compared to the effects of the Project. As permitted by CEQA, the significant effects of the alternatives are discussed in less detail than are the effects of the proposed Project (CEQA *Guidelines* Section 15126.6[d]). All impacts are described after implementation of any mitigation measures identified in Chapter 4 (*Environmental Setting, Impacts, and Mitigation Measures, and Standard Conditions of Approval*) of this EIR.

5.4.1 Alternative 1: No Project Alternative

Under the No Project Alternative, the HEU would not be adopted and the goals and policies within the City's existing Housing Element would remain unchanged. The land use and zoning designations currently in place would continue and development would be subject to policies and standards that currently exist in the City. The overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed Project.

Impacts

Aesthetics

The No Project Alternative would result in less-than-significant effects to aesthetics, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. The City's existing land use and zoning designations would remain as they are currently, as would the City's development standards. While development would still occur, it would conform to existing development patterns and no adverse visual changes would occur.

Air Quality

The No Project Alternative would likely result in significant and unavoidable effects to air quality, similar to the significant and unavoidable impact identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. This lesser-intensity development would presumably emit fewer overall emissions, although larger projects, or those requiring substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could still potentially surpass applicable regulatory criteria. Therefore, impacts would likely be significant and unavoidable, similar to the proposed HEU.

Biological Resources

The No Project Alternative would result in less-than-significant impacts to biological resources, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts to biological resources would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Cultural and Tribal Cultural Resources

The No Project Alternative would result in less-than-significant impacts to cultural and tribal cultural resources, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts to cultural and tribal cultural resources would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Energy

The No Project Alternative would result in less-than-significant impacts to energy, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, any development would still be held to the same energy standards and regulations, regardless of which alternative is adopted, and the impact would be less than significant.

Geology, Soils, and Paleontological Resources

The No Project Alternative would result in less-than-significant impacts to geology, soils, and paleontological resources, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to geology and paleontological resources would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Greenhouse Gas Emissions

The No Project Alternative would result in less-than-significant effects to greenhouse gas emissions, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. This lesser-intensity development would presumably emit fewer greenhouse emissions than the proposed HEU, and would be subject to the same standards and regulatory requirements as the proposed HEU. Overall, the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Hazards and Hazardous Materials

The No Project Alternative would result in less-than-significant impacts to hazards and hazardous materials, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to hazards and hazardous materials would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Hydrology and Water Quality

The No Project Alternative would result in less-than-significant impacts to hazards and hazardous materials, similar to the less than significant impacts identified with the proposed

HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to hydrology and water quality would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Land Use and Planning

The No Project Alternative would result in significant and unavoidable impacts related to land use and planning, as compared to the less-than-significant impacts associated with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Under the No Project Alternative, the HEU would not be adopted and the goals and policies within the City’s existing Housing Element would remain unchanged. The land use and zoning designations currently in place would continue under the land use decisions and development parameters that currently exist in the City. However, this alternative would not update the City’s Housing Element to provide housing to fulfill the requirements of State law or to meet the City’s RHNA requirements, which would be a significant and unavoidable impact, as compared to the less-than-significant impacts associated with the proposed HEU.

Noise and Vibration

The No Project Alternative would result in less-than-significant impacts to noise and vibration, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to noise and vibration would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Population and Housing

The No Project Alternative would result in a less than significant impact to population and housing, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, the HEU would not be adopted and the goals and policies within the City’s existing Housing Element would remain unchanged. Resulting population growth would be less, as the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU, and would be consistent with the City’s current General Plan and zoning, thus constituting “planned” growth.

Public Services and Recreation

The No Project Alternative would result in less-than-significant impacts to public services and recreation, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to public services and recreation would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

Transportation

The No Project Alternative would result in less-than-significant impacts to transportation and traffic, similar to the less-than-significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Total VMT would be less under the No Project Alternative, since there would be less development potential. Per capita VMT would vary depending on the location and type of new development, and individual development projects that are subject to additional review and do not screen out of a VMT analysis would require a separate, project-specific VMT analysis and would be required to implement VMT reduction measures if warranted in accordance with City policy, similar to the proposed HEU.

Utilities and Service Systems

The No Project Alternative would result in less-than-significant impacts to utilities and service systems, similar to the less than significant impacts identified with the proposed HEU. Under the No Project Alternative, residential development in the City could still take place, but the overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to utilities and service systems would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the No Project Alternative would therefore be similar to that of the proposed HEU.

5.4.2 Alternative 2: Reduced Sites Alternative

Under the Reduced Sites Alternative, the number of opportunity sites and rezoning areas identified in the HEU would be reduced and development and resulting construction activity would be located farther from existing neighborhoods. Opportunity sites and rezone areas generally located outside of Precise Plan areas within the Mira Loma/Farley/Rock Street and Springer/Cuesta/Phyllis neighborhoods were eliminated resulting in a reduction of approximately 537 units of development capacity.

Impacts

Aesthetics

The Reduced Sites Alternative would result in less-than-significant effects to aesthetics, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. While development would still occur, it would conform to existing development patterns and no adverse visual changes would occur, similar to the proposed HEU.

Air Quality

The Reduced Sites Alternative would likely result in significant and unavoidable effects to air quality, similar to the significant and unavoidable impact identified with the proposed HEU.

Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. This lesser-intensity development would presumably emit fewer overall emissions, and air quality-related health risk could be reduced in some areas of the City due to the farther distance of some emissions-generating activity to sensitive receptors. However, it is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction criteria air pollutant emission significance thresholds, particularly if the Tier 4 Final equipment required by the mitigation measure is not commercially available. Also, reactive organic gases (ROG) emissions from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the Reduced Sites would conservatively remain significant and unavoidable, similar to the proposed HEU, although potentially reduced due to the development of fewer sites.

Biological Resources

The Reduced Sites Alternative would result in less-than-significant impacts to biological resources, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts to biological resources would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Cultural and Tribal Cultural Resources

The Reduced Sites Alternative would result in less-than-significant impacts to cultural and tribal cultural resources, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts to cultural and tribal cultural resources would be subject to the same standards and regulatory requirements

as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Energy

The Reduced Sites Alternative would result in less-than-significant impacts to energy, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, any development would still be held to the same energy standards and regulations, regardless of which alternative is adopted, and the impact would be less than significant.

Geology, Soils, and Paleontological Resources

The Reduced Sites Alternative would result in less-than-significant impacts to geology, soils, and paleontological resources, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to geology and paleontological resources would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Greenhouse Gas Emissions

The Reduced Sites Alternative would result in less-than-significant effects to greenhouse gas emissions, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. This lesser-intensity development would presumably emit fewer greenhouse emissions than the proposed HEU, and would be subject to the same standards and regulatory requirements as the proposed HEU. Overall, the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Hazards and Hazardous Materials

The Reduced Sites Alternative would result in less-than-significant impacts to hazards and hazardous materials, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to hazards and hazardous materials would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Hydrology and Water Quality

The Reduced Sites Alternative would result in less-than-significant impacts to hazards and hazardous materials, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to hydrology and water quality would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Land Use and Planning

The Reduced Sites Alternative would result in less-than-significant impacts related to land use and planning, as compared to the less-than-significant impacts associated with the proposed HEU. Potential impacts related to land use and planning under the HEU and the Reduced Sites Alternative would be less than significant because each would amend the City's General Plan polices and zoning standards as needed to ensure consistency with City policies and standards, and the impacts under the Reduced Sites Alternative and proposed HEU would therefore be similar. However, it is acknowledged that the Reduced Sites Alternative would reduce the buffer in the housing sites inventory intended to provide housing to fulfill the requirements of State law and to meet the City's RHNA requirements.

Noise and Vibration

The Reduced Sites Alternative would result in less-than-significant impacts to noise and vibration, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to noise and vibration would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Population and Housing

The Reduced Sites Alternative would result in a less than significant impact to population and housing, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Resulting population growth would be less, as the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU, thus constituting "planned" growth.

Public Services and Recreation

The Reduced Sites Alternative would result in less-than-significant impacts to public services and recreation, similar to the less than significant impacts identified with the proposed HEU. Under the Reduced Sites Alternative, the overall number of new units accommodated under the

Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to public services and recreation would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

Transportation

The Reduced Sites Alternative would result in less-than-significant impacts to transportation and traffic, similar to the less than significant impacts identified with the proposed HEU.

Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Total VMT would be less under the Reduced Sites Alternative, since there would be less development potential. Per capita VMT would vary depending on the location and type of new development, and individual development projects that are subject to additional review and do not screen out of a VMT analysis would require a separate, project-specific VMT analysis and would be required to implement VMT reduction measures if warranted in accordance with City policy, similar to the proposed HEU.

Utilities and Service Systems

The Reduced Sites Alternative would result in less-than-significant impacts to utilities and service systems, similar to the less than significant impacts identified with the proposed HEU.

Under the Reduced Sites Alternative, the overall number of new units accommodated under the Reduced Sites Alternative would be anticipated to be lower than those expected to be accommodated by the proposed HEU. Regardless, potential impacts related to utilities and service systems would be subject to the same standards and regulatory requirements as the proposed HEU, and the impacts of the Reduced Sites Alternative would therefore be similar to that of the proposed HEU.

5.5 Overall Comparison of the Alternatives

The analysis of the alternatives is summarized and compared in **Table 5-1**, which provides a summary of impact levels within all environmental topic areas. Overall, this table shows that some alternatives perform better or worse than others in reducing or avoiding the HEU's impacts.

5.5.1 Environmentally Superior Alternative

CEQA *Guidelines* §15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment. CEQA *Guidelines* Section 15126.6(a) places emphasis on alternatives that “avoid or substantially lessen the significant effects” of a project.

Table 5-1 below summarizes the impacts of the identified alternatives and provides a comparison of impacts. While the No Project and Reduced Sites Alternatives could lessen the severity of the identified significant and unavoidable air quality impact identified for the proposed HEU, neither of these alternatives would eliminate the impact, as it is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction criteria air pollutant emission significance thresholds.

**TABLE 5-1
ALTERNATIVE IMPACT SUMMARY AND COMPARISON**

Impact	HEU	Alternative 1: No Project Alternative	Alternative 2: Reduced Sites Alternative
Aesthetics	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Air Quality	Significant and Unavoidable	Significant and Unavoidable \downarrow	Significant and Unavoidable \downarrow
Biological Resources	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Cultural Resources and Tribal Cultural Resources	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Energy	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Geology, Soils, & Paleontological Resources	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Greenhouse Gas Emissions	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Hazards and Hazardous Materials	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Hydrology and Water Quality	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Land Use and Planning	Less than Significant	Significant and Unavoidable \uparrow	Less than Significant \uparrow
Noise	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Population and Housing	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \downarrow
Public Services and Recreation	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Transportation	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow
Utilities and Service Systems	Less than Significant	Less than Significant \uparrow/\downarrow	Less than Significant \uparrow/\downarrow

NOTES:

\downarrow - The impact is less than the proposed HEU.

\uparrow - The impact is greater than the proposed HEU.

\uparrow/\downarrow - The impact is about the same as the proposed HEU.

The No Project Alternative would also introduce a new significant and unavoidable impact related to land use and planning. The No Project Alternative would not meet any of the objectives of the HEU as defined above in Section 5.1.1, nor is it legally feasible to implement. The No

Project Alternative would also not provide housing to fulfill the requirements of State law or meet the City's RHNA requirements, which result in a significant and unavoidable land use and planning impact, as compared to the less-than-significant impacts associated with the proposed HEU and the Reduced Sites Alternative.

Determining an environmentally superior alternative can be difficult because of the many factors that must be balanced. For example, the Reduced Sites Alternative could be preferred because, relative to the proposed HEU, this lesser-intensity development would presumably emit fewer overall emissions, and air quality-related health risk could be reduced in some areas of the City due to the farther distance of some emissions-generating activity to sensitive receptors, even though the impact conclusions would be the same as the proposed HEU. However, the Reduced Sites Alternative would also result in a greater impact to land use and planning due to the reduction in the buffer in the housing sites inventory intended to provide housing to fulfill the requirements of State law and to meet the City's RHNA requirements, although ultimately impacts would be the same as the proposed HEU.

The City has identified the Reduced Sites Alternative as the environmentally superior alternative because of its potential reduction in overall criteria air pollutant emissions and air quality-related health risk. Nonetheless, City decision-makers may weigh the relative benefits of the alternatives differently and with additional information received in or developed during the HEU approval process.

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CHAPTER 6

Other CEQA Considerations

Consistent with the CEQA *Guidelines* Section 15126.2, this section discusses significant environmental effects, significant irreversible environmental changes, and growth-inducing impacts associated with development of the Project. Project effects that were found to be less than significant are also discussed. Cumulative impacts are separately discussed in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*.

6.1 Significant Environmental Effects

Potentially significant environmental impacts that would result from implementation of the HEU are evaluated in the various subsections of Chapter 4.0, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR. With implementation of standard conditions and requirements, and mitigation measures identified for each resource area significantly impacted, many of the potentially significant impacts resulting from implementation of the HEU would be reduced to a less than significant level. The impact listed below would remain significant and unavoidable even after mitigation.

Air Quality Impact AIR-2: Implementation of the HEU would not 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. (*Significant and Unavoidable with Mitigation*)

6.2 Significant Irreversible Environmental Changes

Pursuant to Section 15126.2(c) of the CEQA *Guidelines*, an EIR must consider any significant irreversible environmental changes that would be caused by a project should it be implemented. Section 15126.2(c) states:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Resources that would be permanently and continually consumed by implementation of the HEU include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the

unnecessary, inefficient, or wasteful use of resources. Construction activities related to the various development projects that could result from implementation of the HEU, though analyzed in the applicable technical section of this EIR, would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline for automobiles and construction equipment. With respect to the operational activities associated with the HEU's implementation, compliance with all applicable building codes, as well as EIR mitigation measures, would ensure that all natural resources are conserved to the maximum extent practicable. It is also possible that new technologies or systems would emerge, or would become more cost-effective or user-friendly, and would further reduce reliance upon nonrenewable energy resources.

The CEQA *Guidelines* also require a discussion of the potential for irreversible environmental damage caused by an accident associated with proposed projects. During the construction phase of the various development projects that could result from implementation of the HEU, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. Once constructed, the completed structures would use and store small quantities of chemicals typical in residences, such as household cleaning solutions, paints and thinners, and motor fuel (e.g., motor vehicles and lawn mowers). As stated in Section 4.8, *Hazards and Hazardous Materials*, of this EIR, these materials are regulated through a series of federal, state, and local laws and regulations. Compliance with these existing requirements would ensure that the potential to cause significant irreversible environmental damage from an accident or upset of hazardous materials would be less than significant.

6.3 Growth-Inducing Impacts

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

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

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

the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth is based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Because general plans define the location, type, and intensity of growth within a given jurisdiction, they are the primary means of regulating development and growth in California. Since the Housing Element is a part of the City's General Plan, any updates to that element would by definition provide a means to plan for and regulate development in the areas considered as part of the HEU.

The growth inducing impacts analysis addresses the potential of the HEU's implementation for unplanned growth inducement in the City of Mountain View and broader area. Under CEQA, a project is generally considered to be growth-inducing if it results in any one of the following:

1. Extension of urban services or infrastructure into a previously unserved area;
2. Extension of a transportation corridor into an area that may be subsequently developed; or
3. Removal of obstacles to population growth (such as provision of major new public services to an area where those services are not currently available).

6.3.1 Extension of Urban Services or Infrastructure

The City of Mountain View, particularly in the areas under consideration for the HEU, is essentially built out. Urban services and infrastructure like roadways, utilities, and public services police and fire protection are already established and have been in place for decades. The absence of these types of services is not a constraint to development in the various HEU housing site areas. All of the HEU's housing sites are already developed with residential, commercial, or light industrial uses and are served by existing urban infrastructure and services, or urban infrastructure and services lie immediately adjacent. Although on-site infrastructure improvements would need to be constructed to facilitate development in those areas, development of those areas for residential uses would only require a connection to existing services. In other words, the absence of these types of services does not present a constraint to development in any of the HEU housing areas, and the HEU's implementation would not remove any obstacles to development of those areas. Consequently, implementation of the HEU would not induce unplanned growth in the City or broader area due to extension of urban services or infrastructure.

6.3.2 Extension of a Transportation Corridor

As stated in the discussion above, the County is already served by existing transportation facilities and roadways that lie immediately adjacent to the various HEU housing sites. The established transportation network in the County and adjoining areas offers local and regional access to and from all of the HEU housing sites. Any onsite circulation that would be required in the HEU housing sites would be facilitated by construction of internal streets that would connect

to existing and adjacent roadways. Consequently, implementation of the HEU would not induce unplanned growth in the County or broader area due to extension of transportation corridors.

6.3.3 Removal of Obstacles to Population Growth

Section 15126.2(d) of the CEQA *Guidelines* states that an EIR should discuss “the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Growth can be induced in a number of ways, including through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through precedent-setting action. CEQA requires a discussion of how a project could increase population, employment, or housing in the areas surrounding the project site as well as an analysis of the infrastructure and planning changes that would be necessary to implement the project.

Projects that are characterized as having significant impacts associated with the inducement of growth are frequently those that would remove obstacles to additional growth, such as the expansion of sewer or water facilities that would permit construction of more development in the service area covered by the new facilities. Similarly, if a project would overburden existing infrastructure so as to require construction of new facilities that could result in significant impacts, then the project may be deemed to have a significant growth-inducing impact. In identifying new sites for multi-family housing, the County required that sites have access to existing or planned water, sewer, and other dry utilities with sufficient capacity available to support housing development. As discussed in the Section 4.15, *Utilities and Service Systems*, the potential improvements or extension of utility infrastructure to serve development as a result of the HEU would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in this Draft EIR for overall construction activity for the Project.

Section 4.11, *Population and Housing*, analyzes the project’s overall effect on population and housing, including growth-inducing considerations. In terms of housing, implementation of the HEU could theoretically provide for development of approximately 15,000 residential units to 2031. The resulting population increase would be approximately 30,000 persons. For the City, the HEU would increase the currently allowed cumulative growth in the City by about 4,100 dwelling units. This would be in addition to more than 23,000 net new units that could be allowed under the cumulative growth of the City’s adopted General Plan, zoning, and Precise Plans. As such, the HEU’s contribution to cumulative population growth as a result of rezoning would be approximately 8,200 persons.

This planned population growth in the County has been projected and directed by the Association of Bay Area Governments (ABAG) as part of the 6th Housing Element Cycle to meet the region’s housing needs allocation. Implementation of the HEU would require an amendment to the City’s General Plan and Zoning Code to accommodate the projected growth. Because general plans define the location, type, and intensity of growth within a given jurisdiction, they are the primary means of regulating development and growth in California. Since the Housing Element is a part of the City’s General Plan, any updates to that element would by definition provide a means to plan for and regulate development in the areas considered as part of the HEU. Additional new

residential development that could derive from the HEU's implementation would therefore be consistent with the growth projections in the City's General Plan and Precise Plans as well as applicable regional plans adopted by ABAG and other relevant entities, and would help the region meet its regional housing allocation requirements. Consequently, implementation of the HEU would not induce substantial unplanned population growth that was not previously anticipated.

6.3.4 Summary

Implementation of the HEU would facilitate increased development of residential uses in specific areas of the City. However, it is important to note that while the law requires the HEU to include an inventory of housing sites and requires the City to zone those sites for multifamily housing, the City is not required to actually develop housing on these sites. Future development on the identified sites will be up to the property owners and will be largely dependent on market forces and (in the case of affordable housing) available subsidies.

Regardless, any increased development that could arise in these areas following the HEU's implementation would be developed in compliance with the General Plan land use and zoning designations and Precise Plans. Although on-site infrastructure improvements would occur as part of this development, these improvements would connect to existing infrastructure. No extensions or expansions of infrastructure systems or roads would be required beyond what is needed to serve project-specific demand. Consequently, the HEU's implementation would not induce unplanned growth in the City or broader area due to extension of urban services or infrastructure. For the above-described reasons, implementation of the HEU would not cause a new impact related to a substantial increase in population growth, and would be in line with the projected growth planned for the area as defined in the City's General Plan, Precise Plans, and applicable regional planning directives.

6.4 Cumulative Impacts

CEQA defines cumulative impacts as two or more individual impacts which, when considered together, are substantial or which compound or increase other environmental impacts. The cumulative analysis is intended to describe the "incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable future projects" that can result from "individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines Section 15355) The analysis of cumulative impacts is a two-phase process that first involves the determination of whether a project, together with existing and reasonably foreseeable projects, would result in a significant impact. If there would be a significant cumulative impact of all such projects, the EIR must determine whether the project's incremental "contribution" is cumulatively considerable, in which case, the cumulative impact would be significant (CEQA Guidelines Section 15130).

The analysis of each environmental topic included in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR considers possible cumulative impacts and identifies circumstances in which the Project would contribute to significant cumulative impacts. No cumulative impacts were determined to be significant after mitigation.

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CHAPTER 7

Report Preparers

7.1 Lead Agency

City of Mountain View
Community Development Department
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540

Aarti Shrivastava, *Assistant City Manager/Community Development Director*
Eric Anderson, *Advance Planning Manager*
Ellen Yau, *Senior Planner*

7.2 EIR Consultants

Environmental Consultant

Environmental Science Associates (ESA)
787 The Alameda, Suite 250
San Jose, CA 95126

Luke Evans, <i>Project Director</i>	Technical Review; Quality Assurance/Quality Control
Jill Feyk-Miney, <i>Project Manager</i>	Technical Review; Quality Assurance/Quality Control; Agriculture and Forestry Resources; Population and Housing; Utilities and Service Systems; Alternatives; Other CEQA Considerations
Steve Smith	Aesthetics; Land Use and Planning
Cheri Velzy	Air Quality
Brian Pittman	Biological Resources; Senior Technical Review
Rebecca Acosta	Biological Resources
Jyothi Iyer	Greenhouse Gas Emissions; Energy
Becky Urbano	Historic Architectural Resources
Heidi Koenig	Cultural and Tribal Cultural Resources; Senior Technical Review
Ashleigh Sims	Cultural and Tribal Cultural Resources
Michael Burns	Hazards and Hazardous Materials; Geology, Soils, Paleontological and Mineral Resources; Senior Technical Review
Brandon Carroll	Geology, Soils, Paleontological and Mineral Resources

Ryan Yasuda	Hydrology and Water Quality; Public Services and Recreation
Chris Sanchez	Noise and Vibration; Senior Technical Review
Nick Reynoso	Noise and Vibration
Jason Neilsen	GIS Services
Ron Teitel	Graphics
Kristine Olsen	Word Processing and Report Production

Transportation

Hexagon Transportation Consultants, Inc.
100 Century Center Court, Suite 501
San Jose, California 95112

At van den Hout, *Vice President and Principal Associate*

Utilities

Schaaf and Wheeler Consulting Civil Engineers
4699 Old Ironsides Dr., Ste. 350
Santa Clara, CA 95054

Leif M. Coponen, PE, *Vice President*
Brett F. Crews, *Assistant Engineer*

**FINDINGS OF FACT AND STATEMENT OF
OVERRIDING CONSIDERATIONS**

**FOR THE CITY OF MOUNTAIN VIEW HOUSING
ELEMENT UPDATE PROJECT**



DECEMBER 2022

TABLE OF CONTENTS

Findings of Fact and Statement of Overriding Considerations

	<u>Page</u>
Section 1: Introduction	1
Statutory Requirements for Findings.....	1
Record of Proceedings.....	2
Incorporation By Reference	3
Findings	3
Section 2: Project Background and Overview.....	4
Brief Project Description.....	4
Project Objectives	4
Alternatives	5
Section 3: Effects Determined to Be Mitigated to Less-Than-Significant Levels	6
Section 4: Significant Effects That Cannot Be Mitigated to a Less-Than-Significant Level	24
Section 5: Feasibility of Alternatives to the Proposed Project	27
Project Alternatives	27
Section 6: Statement of Overriding Considerations	29
Section 7: Conclusion; No Recirculation of the Final EIR is Required	32

Section 1: Introduction

Statutory Requirements for Findings

To support a decision on a project for which an Environmental Impact Report (EIR) is prepared, the lead or responsible agency must prepare written findings of fact (Findings) for each significant effect on the environment identified in the EIR (e.g., Section 21081 of the Public Resources Code). The City of Mountain View, as the lead agency, has prepared these Findings for the City of Mountain View Housing Element Update (Project). The Findings must be adopted by the Mountain View City Council, which the City Council hereby elects to do as detailed more fully herein.

Section 15091(a) of the California Environmental Quality Act (CEQA) Guidelines states that:

- a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
 2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives where feasible to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of a project. For those significant effects that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, social, technological, or other benefits of the project outweigh the significant effects on the environment.¹

CEQA Guidelines Section 15093 states: “If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’”

¹ Public Resources Code Section 21081(b).

Record of Proceedings

Various documents and other materials constitute the record of proceedings upon which the City Council bases its Findings and decisions contained herein. For purposes of CEQA and the Findings set forth herein, the record of proceedings (Record of Proceedings) for the City's decision on the Project consists of: (a) matters of common knowledge to the City, including, but not limited to, federal, State and local laws and regulations; and (b) the following documents which are in the custody of the City:

- Notice of Preparation and all other public notices issued by the City in conjunction with the Project (see, e.g., Appendix A of the Draft EIR for the Notice of Preparation);
- The Public Review Draft EIR and supporting documentation prepared for the Project (Draft EIR published in July 2022 and all attached Appendices, and all documents cited, incorporated by reference, or referred to therein);
- All written and verbal comments and documents submitted to the City by agencies, organizations and members of the public on the Project and the Final EIR (before, during, and after the close of the public comment period up through the close of the public testimony portion of the City Council's public hearing on the Project);
- The Mitigation Monitoring and Reporting Program (MMRP);
- The Public Review Final Environmental Impact Report/Responses to Comments Document and supporting documentation prepared for the Project (Final EIR published in November 2022), and all decisions, determinations, documents cited, incorporated by reference, or referred to therein;
- All findings and resolutions adopted by the City in connection with the Project, and all documents cited, incorporated by reference, referred to therein;
- All locally adopted land use plans and ordinances, including, without limitation, general plans, specific plans and ordinances, master plans together with environmental review documents, findings, mitigation monitoring programs, and other documentation relevant to planned growth in the area such as the City of Mountain View 2030 General Plan and Greenhouse Gas Reduction Program, adopted by the City Council on July 10, 2012 and the City's Climate Action Plan (Climate Protection Roadmap adopted in 2015);
- The City of Mountain View 2030 General Plan and Greenhouse Gas Reduction Program Environmental Impact Report (SCH No. 2011012069), including all appendices attached thereto, certified by the Mountain View City Council on July 10, 2012, and all findings, decisions, determinations, and resolutions adopted by the City in connection with the General Plan EIR;
- All staff reports, presentation materials, and other documents prepared by the City with respect to the Final EIR and the Project, and any minutes or verbatim transcripts of all

information and Study Sessions, workshops, public meetings and public hearings held by the City in connection with the Project; and

- Any other materials required to be in the record of proceedings by public Resources Code Section 21167.6, subdivision (e).

The location and custodian of the documents and other materials that constitute the record of proceedings are:

City of Mountain View Community Development Department
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540
Contact: Ellen Yau, ellen.yau@mountainview.gov

Incorporation By Reference

The Final EIR is hereby incorporated into these Findings in its entirety. Without limitation, this incorporation is intended to elaborate on the comparative analysis of alternatives, the basis for determining the significance of impacts, the scope and nature of mitigation measures, and the reasons for approving the Project despite the conclusion regarding associated significant and unavoidable adverse impact.

Findings

The Findings set forth herein are based on substantial evidence contained in the Record of Proceedings, including, without limitation, the Final EIR, including relevant technical studies, reports, and evaluations supporting the Final EIR's analysis. As previously stated, the Draft EIR (including, without limitations, all appendices attached thereto) addresses the potential effects on the environment that are associated with the Project as required under CEQA, and the Final EIR includes the public comments received on the Draft EIR and minor text and graphic revisions to the Draft EIR, which includes the Errata document dated November 2022. See Section 1 above for information regarding the location and custodian of the documents that comprise the Record of Proceedings.

Section 2: Project Background and Overview

This section provides a brief description of the Project, lists the objectives of the Project, and lists the Project alternatives evaluated in the Draft EIR.

Brief Project Description

The proposed Project includes actions by the City of Mountain View to update the City's Housing Element in conformance with State law and make necessary adjustments to other elements of the City's General Plan, zoning, and precise plans to maintain consistency within and between these documents. State law requires the City to update its current housing element by January 31, 2023. The Project analyzed in the EIR would include adoption of a General Plan amendment to add or modify goals, objectives, policies, and implementation programs related to housing in the Housing Element of the City's General Plan. The Housing Element itself would contain: an updated housing needs assessment; updated goals, policies, and programs that address the maintenance, preservation, improvement, and development of housing and that affirmatively further fair housing; and a housing inventory that meets the City's Regional Housing Needs Assessment (RHNA) allocation and provides a buffer of additional housing development capacity. The Project would also include modifications to provisions in the City's General Plan Land Use Map, zoning ordinance, zoning map, and adopted Precise Plans, as needed, to reflect the housing sites inventory. Based on the City's RHNA allocation, the HEU plans for an additional 11,135 dwelling units plus a sizeable "buffer." This EIR evaluates the potential for approximately 18,000 multi-family housing units (including approximately 96 accessory dwelling units) during the HEU planning period (2023-2031) as a maximum scenario for purposes of the CEQA evaluation, understanding that the buffer size and the final sites selected for inclusion in the Housing Element will be determined by the City Council upon adoption of the HEU. Of this, approximately 16,530 units are already allowed under the City's adopted General Plan, zoning, and Precise Plans and the remaining 1,250 units would be created through rezonings and General Plan amendments. In addition, the EIR also analyzes a possible increase in housing production from rezonings and General Plan Amendments of approximately 2,850 units beyond 2031.

Project Objectives

The primary purpose of the HEU is to comply with the requirements of State law by analyzing existing and projected housing needs, and updating goals, policies, objectives, and implementation programs for the preservation, improvement, and development of housing. The proposed Project is intended to ensure the City's conformance with State housing requirements and seeks to:

- Protect existing housing;
- Encourage new housing for households at all income levels and for households with a range of diverse housing needs;
- Remove undue constraints on new housing development, including for affordable housing development;
- Affirmatively further fair housing; and

- Identify specific sites that could accommodate required housing units to meet the City's RHNA.

Conducting community engagement and soliciting feedback to inform the contents of the HEU is a critical component of the planning process and will help to shape the HEU that is ultimately adopted by the City Council.

Alternatives

Based on the Project objectives and anticipated environmental consequences and pursuant to Section 15126.6 of the CEQA Guidelines, the following Project alternatives were selected for analysis:

- **Alternative 1: No Project.** This alternative assumes that the HEU would not be adopted and that the goals and policies within the existing Housing Element would remain unchanged. Further, the City's existing land use and zoning designations would also remain unchanged. Rezoning within portions of the City would not occur, however reasonably foreseeable development could still proceed, and residential development within the City would continue to be directed and governed in the manner that it is currently.
- **Alternative 2: Reduced Sites Alternative.** This alternative would reduce the number of opportunity sites and rezoning areas identified in the HEU and locate development and resulting construction activity farther from existing neighborhoods.

A more detailed description of these alternatives and required findings are set forth in Section 5 of this document, Feasibility of Project Alternatives. The detailed description is also provided in Chapter 5 of the Draft EIR.

Section 3: Effects Determined to Be Mitigated to Less-Than-Significant Levels

The Final EIR identified certain impacts that would not be significant under the applicable CEQA thresholds and certain potentially significant effects that could result from the Project. Adoption of the mitigation measures described therein and summarized below will reduce these potentially significant effects to less-than-significant levels in most circumstances. The City makes CEQA Guidelines Section 15091 finding (a) with respect to all of the following impacts. This section provides a summary of the environmental effects of the Project determined to be less than significant as a result of the implementation of mitigation, which are evaluated in detail in the Final EIR, and provides written findings for each of those effects and significance conclusions, accompanied by a brief explanation of the rationale for each finding.

Air Quality

Impact AIR-3: Implementation of the Project could expose sensitive receptors to substantial pollutant concentrations; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.

Project applicants within the HEU area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level Health Risk Assessment (HRA) of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the Bay Area Air Quality Management District (BAAQMD), California Air Resources Board (CARB), California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) and United States Environmental Protection Agency (U.S. EPA). Estimated project-level health risks shall be compared to the BAAQMD's health risk significance thresholds for projects.

In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AIR-1's requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less than significant level. In addition, all tower cranes, forklifts, man- and material- lifts shall be electric powered.

Finding

Mitigation Measure AIR-2 would require subsequent projects within 1,000 feet of existing or approved sensitive receptors to undergo a project-level HRA at the time the project is proposed and to utilize the clean construction equipment required by Mitigation Measure AIR-1 if the project-specific health risk thresholds are exceeded. Implementation of Mitigation Measure AIR-2 would reduce construction health risk impacts to less than significant with mitigation by use of

clean construction equipment that meet the Tier 4 Final off-road emission standards, or equivalent Verified Diesel Emission Control Strategy (VDECS), as certified by CARB.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant air quality impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact AIR-1.CU: Implementation of the Project, when combined with other past, present, or reasonably foreseeable projects, could result in exposure of sensitive receptors to substantial levels of fine particulate matter (PM_{2.5}) and toxic air contaminants (TACs) under cumulative conditions; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measure AIR-2.**

Finding

Health risk impacts from construction of residences within the Project areas could combine with risks from these existing TAC sources that would exceed BAAQMD cumulative risk thresholds. However, future development under the Project would not cause a significant contribution to these existing risk levels, as shown in Impact AIR-3. Therefore, this impact would be less than significant with incorporation of Mitigation Measure AIR-2.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant air quality impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Biological Resources

Impact BIO-1: Implementation of the Project could 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); however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure BIO-1: Special-Status Bat Protection Measures.

In coordination with the City, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the subsequent project sites to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:

- Removal of trees shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 16 – August 14) and outside the months of winter torpor (approximately October 16 – February 28), to the extent feasible.
- If removal of trees during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and building removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by a qualified biologist. A 100-foot no-disturbance buffer is a typical protective buffer distance; however, this may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation) as well as the type of construction activity which would occur around the roost site.
- The qualified biologist shall be present during tree removal if potential bat roosting habitat or active bat roosts are present. Trees with active roosts shall only be removed when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F.
- Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process:
 - On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws.

- On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe).

Finding

The Project has the potential to adversely affect special-status bats which may roost in and around the Project area through the removal of trees during construction. Direct mortality of special-status bats would be a significant impact. Potential Project-related impacts to special-status bats would be minimized to a less-than-significant level with the implementation of Mitigation Measure BIO-1, which would require preconstruction survey for special-status bats and other avoidance measures during construction. With incorporation of this mitigation measure, construction-related impacts to special-status bats roosting in and around the Project area would be minimized and the impact would be less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant biological resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact BIO-1.CU: Implementation of the Project, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on Biological Resources; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measure BIO-1**.

Finding

The implementation of Mitigation Measure BIO-1 would avoid and minimize impacts to roosting bats, thereby reducing the magnitude of this impact at the project-level to less than significant. The Project's contribution would not be considered cumulatively considerable because the Project would, like other projects that are part of the cumulative scenario, be required to implement all feasible mitigation measures to reduce potential impacts special-status bats, including performing preconstruction surveys to identify and protect active bat roosts. Therefore, the cumulative impacts to special-status bats would be less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant biological resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that

implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Cultural and Tribal Cultural Resources

Impact CUL 1: Implementation of the Project could cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure CUL 1a: Historic Resource Evaluation.

Prior to issuance of a demolition permit for any previously unevaluated building 45-years of age or older on a site included in the housing sites inventory, the City shall require an evaluation of historical significance that includes consideration of the criteria for listing in the National Register of Historic Places, the California Register of Historical Resources, and the Mountain View Register of Historic Resources. This evaluation shall be completed by a professional who meets the Secretary of the Interior’s Professional Qualifications for History, Architecture, Architectural History, or Historic Architecture.

In accordance with Section 5024.1, if the building has been previously evaluated for eligibility as a historic resource under CEQA and that evaluation or survey is more than five-years old, the findings of that evaluation should be confirmed by a professional who meets the Secretary of the Interior’s Professional Qualifications as stated above.

Mitigation Measure CUL 1b: Historic Resource Avoidance.

If, after implementation of Mitigation Measure CUL 1a, the subject property is found to qualify as a historic resource and the proposed project includes demolition of the historic resource, the project shall be redesigned to remove or avoid demolition. Any redesign that includes significant alteration of the historic resource, as defined by Section 36.54.55(e) of the City of Mountain View Zoning Code, shall be required to comply with City Standard Condition of Approval (Secretary of the Interior Standards).

Finding

Housing development planned under the Project could result in the demolition or significant alteration of potential historical resources (as defined in Sec. 36.54.55 of the Zoning Code). It could also diminish the ability of historical resources to convey their historical significance, which would constitute a substantial adverse change in the significance of the resources. However, with implementation of the General Plan polices, adherence to existing zoning and permit procedures, and application of Mitigation Measure CUL-1a and CUL-1b, impacts to

known and potential historic resources at the National, State, and local levels would be reduced to less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact CUL 1.CU: Implementation of the Project, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on historic architectural resources; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures CUL-1a** and **CUL-1b**.

Finding

Implementation of Mitigation Measure CUL-1a which would require previously unevaluated historic-age resources be evaluated, Mitigation Measure CUL-1b would require demolition avoidance for historic architectural resources, and City Standard Condition of Approval (Secretary of the Interior Standards) which would require Secretary of the Interior's Standards compliance review for significant alterations of historic resources, would reduce the severity of impacts associated with the Project. Combined with General Plan Policies LUD 11.1 – 11.4 and the procedures for identification and alteration of historic resources in Division 15 of the Mountain View Zoning Code, the impacts associated with implementation of the Project would be mitigated to a less than significant level. The General Plan Policies and Zoning Code also apply to all projects identified in the cumulative project list. As a result, the Project's contribution to the potentially significant cumulative impact on historic architectural resources would not be considerable, and the cumulative impact of the Project combined with cumulative development would be less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant

level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact CUL 2: Implementation of the Project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources.

If pre-contact or historic-era archaeological resources are encountered during project construction and implementation, all construction activities within 100 feet shall halt and the City shall be notified. Pre-contact 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology shall inspect the findings within 24 hours of discovery.

If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4, with a preference for preservation in place. If preservation in place is feasible, this may be accomplished through one of the following means: (1) siting improvements to completely avoid the archaeological resource; (2) incorporating the resource into a park or dedicated open space, by deeding the resource into a permanent conservation easement; (3) capping and covering the resource before building the project on the resource site after the resource has been thoroughly studied by a SOIS qualified archaeologist and a report written on the findings.

If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to Public Resources Code (PRC) Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).

Mitigation Measure CUL 2b: Cultural Resources Study Requirements.

Prior to approval of development permits for multifamily projects that include ground-disturbing activities, individual project applicants shall request a non-confidential records search from the Northwest Information Center (NWIC) to determine if the proposed project site has

archaeological sensitivity. If the NWIC recommends that the proposed project site be reviewed by an archaeologist, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior's Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.

Finding

Mitigation Measure CUL-2a, Inadvertent Discovery of Cultural Resources revises the Discovery of Archaeological Resources Standard Condition to require a stop-work boundary around cultural material finds and establish protocol for avoidance or preservation in place of significant cultural resources, and Mitigation Measure CUL-2b, Cultural Resources Study Requirements establishes a requirement for a cultural resource study for all multifamily housing projects that require ground disturbance based upon review of a NWIC non-confidential records search of the proposed project site. These mitigation measures would address potential impacts to archaeological resources and reduce the potential of the Project to impact archaeological resources to a less-than-significant level.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact CUL 2.CU: Implementation of the Project, in combination with other cumulative development, could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or could disturb human remains, including those interred outside of formal cemeteries; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures CUL-2a** and **CUL-2b**.

Finding

The Project would contribute a negligible less than significant impact after the implementation of Measures CUL 2a and CUL 2b, which would require a SOIS qualified archaeologist to conduct a review of discretionary projects near known cultural resources or within archaeological sensitivity areas prior to construction, the cessation of activities in the vicinity of finds, and tribal consultation when indigenous resources are inadvertently identified during project construction. As a result, the less-than-significant incremental impact would not be cumulatively considerable and thus would not combine with the incremental impact of other projects to cause a significant cumulative effect.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact TCR-1: Implementation of the Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures CUL-2a** and **CUL-2b**.

Finding

Implementation of Measures CUL 2a and CUL 2b would establish protocol to identify, evaluate, and address any potential impacts to previously unknown tribal cultural resources. With implementation of these mitigation measures, any potential impacts to tribal cultural resources would be reduced to a less than significant level.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant tribal cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact TCR-1.CU: Implementation of the Project, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on tribal cultural resources; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures CUL-2a** and **CUL-2b**.

Finding

The Project would contribute a negligible less-than-significant incremental impact after the implementation of Measures CUL-2a and CUL-2b, which would require a SOIS qualified archaeologist to conduct a review of discretionary projects near known cultural resources or within archaeological sensitivity areas prior to construction, the cessation of activities and buffering of finds, and tribal consultation when indigenous resources are unexpectedly discovered during project construction. As a result, the Project's incremental impact would not be cumulatively considerable and would not result in a significant cumulative effect.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant tribal cultural resources impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Greenhouse Gas Emissions

Impact GHG-1: Implementation of the Project could generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure GHG-1: Require Compliance with Electric Vehicle (EV) Requirements in CALGreen Tier 2.

Subsequent development projects proposed as part of the HEU shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.

Mitigation Measure TRA-1: Implement Vehicle Miles Traveled (VMT) Reduction Measures.

Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the Santa Clara Valley Transportation Authority (VTA) VMT tool:

- Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT.
- Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City's approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.)
- Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs.
- Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative

effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools.

Finding

With the implementation of Mitigation Measure GHG-1 and TRA-1, all future projects proposed for development pursuant to the Project would be consistent with the BAAQMD's recommended GHG significance thresholds. Compliance with these thresholds would mean that these projects would not generate GHG emissions either directly or indirectly, that would have a significant impact on the environment. Therefore, this impact would be considered less than significant with mitigation.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant GHG impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact GHG-2: Implementation of the Project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures GHG-1 and TRA-1.**

Finding

Implementation of Mitigation Measure GHG-1 would ensure the Project's consistency with BAAQMD GHG threshold A(2)(a) by requiring future development under the Project to comply with the EV charging infrastructure requirements in the version of CALGreen standards in place at the time of individual project review. The Project would be consistent with the other three GHG thresholds recommended by the BAAQMD. With implementation of Mitigation Measure GHG-1, the Project would be consistent with the updated GHG thresholds recommended by the BAAQMD to meet the state's GHG reduction and carbon neutrality goals in SB 32, EO B-55-13 and the 2017 Scoping Plan Update. Therefore, this impact would be less than significant with mitigation.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant GHG impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact GHG-1.CU: Implementation of the Project, in combination with past, present, existing, approved, pending, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to GHG emissions that may have a significant impact on the environment or conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measures GHG-1** and **TRA-1**.

Finding

Implementation of the Project would result in less than significant impacts with implementation of Mitigation Measure GHG-1 and TRA-1 by ensuring consistency with all four GHG thresholds recommended by the BAAQMD which would in turn ensure consistency with the state's GHG reduction and carbon neutrality goals for 2030 and beyond. Given that GHG emission impacts are cumulative in nature, the Project's incremental contribution to significant cumulative GHG emissions would therefore not be cumulatively considerable, and the cumulative impact of GHG emissions generated by the Project would be less than significant with mitigation.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant GHG impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Hazards and Hazardous Materials

Impact HAZ-3: Implementation of the Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, could create a significant hazard to the public or the environment; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure HAZ-1: Phase I Environmental Site Assessment.

Prior to the initiation of any construction requiring ground-disturbing activities on listed active hazardous materials cleanup sites, the project applicant shall complete a Phase I environmental site assessment for that property in accordance with American Society for Testing and Materials Standard E1527 for those active hazardous materials sites to ascertain their current status. Any recommended follow up sampling (i.e., Phase II activities) set forth in the Phase I assessment shall be implemented prior to construction. The results of Phase II studies, if necessary, shall be submitted to the local overseeing agency and any required remediation or further delineation of identified contamination shall be completed prior to commencement of construction.

Prior to final project design of any individual project that includes any earth-disturbing activities, the project applicant shall conduct a Phase I Environmental Site Assessment (Phase I assessment). The Phase I assessment shall be prepared in general accordance with ASTM Standard E1527-21, Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process (or most current edition that is in force at the time of final project design), which is the current industry standard. The Phase I assessment shall include a records review of appropriate federal, State, and local databases within ASTM-listed search distances regarding hazardous materials use, storage, or disposal at the given site, a review of historical topographic maps and aerial photographs, a site reconnaissance, interviews with persons knowledgeable about the sites historical uses, and review of other relevant existing information that could identify the potential existence of Recognized Environmental Conditions, including hazardous materials, or contaminated soil or groundwater. If no Recognized Environmental Conditions are identified, then no further action would be required.

If Recognized Environmental Conditions are identified and the Phase I assessment recommends further action, the project applicant shall conduct the appropriate follow-up actions, which may include further records review, sampling of potentially hazardous materials, and possibly site cleanup. In the event that site cleanup is required, the project shall not proceed until the site has been cleaned up to the satisfaction of the appropriate regulatory agency (e.g., Department of Toxic Substances Control [DTSC], Regional Water Quality Control Board [RWQCB], or Santa Clara County Department of Environmental Health [SCCEHD]) such that the regulatory agency issues a No Further Action letter or equivalent.

Finding

Mitigation Measure HAZ-1 would ensure that site assessment and, if needed, site cleanup, would occur prior to any earth-disturbing activities within a given project site. This would reduce the potential for an unanticipated discovery during project construction, and reduce the potential

effects on construction workers, the public, and the environment. With the implementation of this mitigation measure, this impact would be reduced to less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant hazardous materials impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Transportation

Impact TRA-2: Implementation of the Project could exceed an applicable vehicle miles traveled (VMT) threshold of significance; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure TRA-1: Implement VMT Reduction Measures.

Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the Santa Clara Valley Transportation Authority (VTA) VMT tool:

- Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT.
- Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City's approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.)

- Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs.
- Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools.

Finding

Mitigation Measure TRA-1 would ensure that VMT per resident is less than 85 percent of the regional VMT per resident for residential sites located in areas of the City where the VMT per resident is higher than 85 percent. With the implementation of this mitigation measure, this impact would be reduced to less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant transportation impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact TRA-2.CU: Implementation of the Project, in combination with cumulative development, could exceed an applicable VMT threshold of significance; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measure TRA-1**.

Finding

Project sites that are located in areas of the City where the VMT per resident is higher than 85 percent can be mitigated by implementing the mitigation measures identified in Mitigation Measure TRA-1. Therefore, the Project sites, in combination with cumulative developments, would also result in a less than significant VMT impact with mitigation.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant transportation impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Utilities and Service Systems

Impact UTL-1: Implementation of the Project could require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; however, with implementation of the identified mitigation, this impact would be less than significant.

Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements.

Subsequent development projects shall contribute the fair share amount identified by the City of Mountain View Public Works Department to fund capital improvements to the water, sanitary sewer, and stormwater drainage systems prior to issuance of a building permit.

Finding

Overall, the potential improvements or extension of utility infrastructure to serve development as a result of the Project would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in the EIR for overall construction activity for the project. As such, the implementation of the Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Mitigation Measure UTL-1 would ensure that subsequent development projects contribute their fair share toward Capital Improvement Projects (CIPs) identified by the City, based on the project's determined contribution. The impact would be less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant utilities impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set

forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Impact UTL-1.CU: Implementation of the Project, when combined with other past, present, or reasonably foreseeable projects, could contribute considerably to cumulative impacts on utility infrastructure; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **Mitigation Measure UTL-1.**

Finding

Cumulative development would be subject to applicable development and utilities fees that would be collected by the City, construction of system improvements, and fair-share contributions to address the new utility system demand. The potential improvement or extension of utility infrastructure to serve cumulative development would be installed primarily in existing roadways and utility rights-of-way. Aside from short-term construction disturbance, no unusual or further environmental impacts would be generated beyond those identified elsewhere in the EIR for overall construction activity associated with future development as a result of the Project. For these reasons, and because changes proposed to utilities infrastructure as part of future developments will be subject to review and permitting requirements, and Mitigation Measure UTL-1, the Project would not contribute considerably to a significant cumulative impact in this regard, and impacts would be less than significant.

Mitigation measures have been identified that, when implemented by the Project, will avoid or reduce this potentially significant utilities impact to a less-than-significant level, as described more fully in the Final EIR. The City of Mountain View hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final EIR and adoption of the mitigation measures set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project.

Section 4: Significant Effects That Cannot Be Mitigated to a Less-Than-Significant Level

This section provides a summary of the environmental effects of the Project determined to be significant and unavoidable, which are evaluated in detail in the Final EIR, and provides written findings for each of those significant effects and significance conclusions, accompanied by a brief explanation of the rationale for each finding.

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented, because feasible mitigation would not reduce the impact to a less-than-significant level. Here, the Project will result in a project-level air quality impact that cannot be fully mitigated. The City makes Section 15091(a) findings (1) and (3) with respect to this impact for the reasons summarized below and as detailed more fully in the Final EIR.

Air Quality

Impact AIR-2: Implementation of the HEU 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.

Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.

Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.

In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.

Clean Construction Equipment.

1. The project applicant shall use electric construction equipment when feasible.
2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4)

Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement must state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract.

The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.

3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit.

Operational Emission Reductions

1. Projects shall be constructed without natural gas infrastructure and shall be “all electric.”
2. As required by Mitigation Measure GHG-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time.
3. Project applicants that do not screen out from VMT impact analysis shall implement VMT reduction measures as required by Mitigation Measure TRA-1.

Finding

Mitigation Measure AIR-1 is expected to be effective at reducing criteria pollutant emissions from construction and operation of individual projects developed in the Project area to below the BAAQMD thresholds; however, the specific emissions associated with future projects are not currently known, and therefore the effectiveness of emission reduction measures cannot be definitively determined. It is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction significance thresholds, particularly if the Tier 4 Final equipment required by the mitigation measure is not commercially available. Also, reactive organic gas (ROG) emissions

from consumer products used during project operations may remain significant because use of such products is a function of consumer choice and commercial availability. For these reasons, criteria air pollutants from construction and operation of subsequent projects developed under the Project would conservatively be significant and unavoidable with mitigation.

The identification of this significant and unavoidable impact does not preclude the finding of a less-than-significant or less-than-significant-with-mitigation impact for subsequent projects that are below the applicable screening criteria or that meet the criteria air pollutant thresholds of significance with implementation of Mitigation Measure AIR-1.

Mitigation measures have been incorporated into the Project that will reduce the above-described significant air quality impact, but the mitigation would not reduce impact to a less-than-significant level, as described more fully in the Final EIR. The City hereby finds that implementation of the mitigation measures described above is feasible and they are hereby adopted and incorporated into the Project as enforceable conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which substantially lessen the significant effects as identified in the Final EIR but not to a level of insignificance. Adoption of the conditions of approval will ensure the mitigation measures would be implemented as part of the Project. Since mitigation would not be adequate to reduce the significant air quality impact to a less than significant level, the impact is identified as significant and unavoidable.

Section 5: Feasibility of Alternatives to the Proposed Project

The Draft EIR included several Project alternatives. The City hereby concludes that the Draft EIR sets forth a reasonable range of alternatives to the Project so as to foster informed public participation and informed decision-making. The City finds that the alternatives identified and described in the Draft EIR were considered and further finds that two of them (an off-site alternative, an alternative containing Additional Housing Sites, and an alternative using reduced parking ratios) to be infeasible for the specific economic, social, or other considerations set forth below pursuant to CEQA Section 21081 as described in Section 5.2.1 of the Draft EIR.

In addition to the Project, the following alternatives were evaluated in the Draft EIR and are more fully described in Chapter 5 of the Draft EIR. Each alternative was evaluated against the Project Objectives listed in Section 2 of this document, as reference points for stakeholders and decision-makers in evaluating Project alternatives.

Project Alternatives

No Project Alternative

Under the No Project Alternative, the Project would not be adopted and the goals and policies within the City's existing Housing Element would remain unchanged. The land use and zoning designations currently in place would continue the land use decisions and development parameters that currently exist in the City. The overall number of new units accommodated under the No Project Alternative would be anticipated to be lower than those expected to be accommodated by the proposed Project.

Finding

While the No Project Alternative could lessen the severity of the identified significant and unavoidable air quality impact identified for the proposed Project, the No Project Alternative would not eliminate the impact, as it is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction criteria air pollutant emission significance thresholds.

The No Project Alternative would also introduce a new significant and unavoidable impact related to land use and planning. The No Project Alternative would not meet any of the objectives of the HEU as defined above in Section 5.1.1, nor is it legally feasible to implement. The No Project Alternative would also not provide housing to fulfill the requirements of State law or meet the City's RHNA requirements, which result in a significant and unavoidable land use and planning impact, as compared to the less-than-significant impacts associated with the proposed Project. For all of these reasons, this alternative is infeasible, as supported by the administrative record for the proposed project.

Reduced Sites Alternative

Under the Reduced Sites Alternative, the number of opportunity sites and rezoning areas identified in the Project would be reduced and development and resulting construction activity would be located farther from existing neighborhoods. Opportunity sites and rezone areas generally located outside of Precise Plan areas within the Mira Loma/Farley/Rock Street and Springer/Cuesta/Phyllis neighborhoods were eliminated resulting in a reduction of approximately 537 units of development capacity.

Finding

While the Reduced Sites Alternative could lessen the severity of the identified significant and unavoidable air quality impact identified for the proposed Project, the Reduced Sites Alternative would not eliminate the impact, as it is possible that projects with substantial ground disturbance, specialty construction equipment, or compressed and highly intensive construction schedules could exceed construction criteria air pollutant emission significance thresholds.

This alternative would meet the objectives of the Project, but to a lesser extent than the proposed Project. Fewer sites would be identified under the Reduced Sites Alternative that could accommodate required housing units to meet the City's RHNA. As such, there would be lesser encouragement of new housing for households at all income levels and for households with a range of diverse housing needs and a reduction in the removal of constraints on new housing development, including for affordable housing development. For all of these reasons, the City Council declines to adopt the Reduced Sites Alternative.

Environmentally Superior Alternative

CEQA *Guidelines* §15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment. CEQA *Guidelines* Section 15126.6(a) places emphasis on alternatives that “avoid or substantially lessen the significant effects” of a project.

Determining an environmentally superior alternative can be difficult because of the many factors that must be balanced. For example, the Reduced Sites Alternative could be preferred because, relative to the proposed Project, this lesser-intensity development would presumably emit fewer overall emissions, and air quality-related health risk could be reduced in some areas of the City due to the farther distance of some emissions-generating activity to sensitive receptors, even though the impact conclusions would be the same as the proposed Project. However, the Reduced Sites Alternative would also result in a greater impact to land use and planning due to the reduction in the buffer in the housing sites inventory intended to provide housing to fulfill the requirements of State law and to meet the City's RHNA requirements, although ultimately impacts would be the same as the proposed Project. The City has identified the Reduced Sites Alternative as the environmentally superior alternative because of its potential reduction in overall criteria air pollutant emissions and air quality-related health risk.

Section 6: Statement of Overriding Considerations

The City is the lead agency under CEQA for preparation, review, and certification of the Final EIR. As the lead agency, the City is also responsible for determining the potential environmental impacts of the proposed action, which of those impacts are significant, and which impacts can be mitigated through imposition of feasible mitigation measures to avoid or minimize such impacts to a level of “less than significant.”

CEQA requires the lead agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable adverse impacts when determining whether to approve a project. In particular, Public Resources Code section 21081(a) provides that no public agency may approve or carry out a project for which an environmental impact report has been certified that identifies one or more significant effects on the environment that would occur if the project is approved or carried out, unless the public agency makes one or more of three findings with respect to each significant effect. Public Resources Code section 21081(b) requires that where a public agency finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in an EIR and thereby leave significant unavoidable effects, the lead agency must also find that overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects of the project. If the specific economic, legal, social, technological or other benefits of a project outweigh the unavoidable adverse environmental effects, those effects may be considered acceptable [CEQA Guidelines, Section 15093(a)].

CEQA requires the lead agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the Final EIR or elsewhere in the administrative record [CEQA Guidelines, Section 15093(b)]. The statement of overriding considerations shall be supported by substantial evidence in the record. If a lead agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. The statement of overriding considerations does not substitute for, and is in addition to, findings required by CEQA Guidelines section 15091.

As required under Public Resources Code Section 21081 and CEQA Guidelines Section 15093, the City, having reviewed and considered the Final EIR, all other written materials within the Record of Proceeding, and all oral testimony presented at public hearings and other public meetings on the Final EIR, has balanced the benefits of the proposed Project against the identified unavoidable adverse impacts associated with the Project, and hereby adopts all feasible mitigation measures with respect to such impacts, certifies the Final EIR, and approves the Project. The City has also examined alternatives to the Project, none of which is feasible, meets the majority of the Project objectives, or is environmentally preferable to the Project for the reasons discussed in the Summary of Alternatives Evaluated (Section 5) and the Final EIR.

After balancing the specific economic, legal, social, technological, and other benefits of the proposed Project, the City has determined that the unavoidable adverse environmental impacts

identified above are acceptable due to the following specific considerations in the record, which outweigh the unavoidable, adverse environmental impacts of the Project. Each of the considerations in the record, standing alone, is sufficient to support approval of the Project, in accordance with CEQA.

The Project will result in an air quality impact that cannot be fully mitigated. Mitigation measures have been incorporated into the Project, however, these would not fully mitigate the impact under CEQA. This significant unavoidable impact is identified and discussed in Section 4 of these Findings. The City further specifically finds that the significant unavoidable air quality during construction, is outweighed by the proposed Project's benefits and is acceptable in light of the benefits of the project, based on the findings below:

- The City has made a reasonable and good faith effort to eliminate or substantially mitigate the potential impacts resulting from the Project, as described above.
- All Mitigation Measures recommended in the Final EIR have been incorporated into the Project as enforceable conditions of approval and will be implemented through the MMRP, incorporated by reference herein.
- In accordance with CEQA Guidelines Section 15093, the City has, in determining whether or not to approve the Project, balanced the economic, legal, social, technological, and other benefits, including regionwide or Statewide environmental benefits of the project against these unavoidable environmental risks, and has found that the benefits of the Project outweigh the unavoidable adverse environmental effects. The following statements specify the reasons why, in the City's judgment, the benefits of the Project outweigh its unavoidable environmental risks. The City also finds that any one of the following reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the City will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the City's Findings and the benefits described below can be found in the Record of Proceedings.
- The Project will assist the City in meeting its RHNA and goals for the preservation, improvement, and development of housing in the City, including affordable housing. This will have benefits in reducing the City's jobs-housing imbalance, which will improve access to jobs for the region. It will also increase the availability of affordable housing, improving standards of living for lower and moderate-income individuals and families.
- Providing housing associated with the Project to meet the needs of all income levels is critical to the long-term social and economic health of the City of Mountain View, including attracting and retaining middle-income professionals such as teachers and firefighters, providing housing opportunities for an aging population and/or multi-generational living, and managing the effects of homelessness on the community.

- The Project will allow the City to comply with State housing law, retain local land use control, and maintain eligibility to receive critical State and Federal funding for infrastructure improvements and public amenities.
- The Project supports the City’s efforts to reduce dependency on fossil fuels and nonrenewable energy, to decrease its share of GHG emissions and contributions to global climate change, and to help make Mountain View a more attractive place to live by adding density on underutilized sites served by existing transportation and infrastructure including the requirements not to incorporate any natural gas infrastructure.

As mentioned above, the foregoing benefits provided to the public and the broader Mountain View community through approval and implementation of the Project outweigh the identified significant adverse environmental impact of the Project that cannot be mitigated. Each of the Project benefits separately and individually outweighs the unavoidable adverse environmental impact identified in the Final EIR, and therefore, the City finds those impacts to be acceptable.

Economic, social, and other considerations and benefits derived from the development of the Project override and make infeasible any alternatives to the Project or further mitigation measures beyond those incorporated into the Project as set forth in the MMRP.

On balance, the City finds that there are specific considerations associated with the Project that serve to override and outweigh the Project’s significant unavoidable effect. Therefore, pursuant to CEQA Guidelines Section 15093, this adverse effect is considered acceptable.

For the foregoing reasons and as otherwise supported by substantial evidence in the Record of Proceeding, the City hereby adopts this Statement of Overriding Considerations (“SOC”), which has balanced the benefits of the Project against its significant unavoidable adverse environmental impacts in reaching a decision to approve the Project.

Each of the Project benefits separately and individually outweighs the unavoidable adverse environmental impact identified in the Final EIR and therefore finds those impacts to be acceptable.

Economic, social, and other considerations and benefits derived from the development of the Project override and make infeasible any alternatives to the Project or further Mitigation Measures beyond those incorporated into the Project.

On balance, the City finds that there are specific considerations associated with the Project that serve to override and outweigh the Project’s significant unavoidable effect. Therefore, pursuant to CEQA Guidelines Section 15093, this adverse effect is considered acceptable.

Section 7: Conclusion; No Recirculation of the Final EIR is Required

An EIR is adequate as long as it provides specific response to all specific questions about significant environmental issues and as long as the EIR, as a whole, reflects a good-faith effort at full disclosure. “Recirculation is not required where the new information added to an EIR merely clarifies or amplifies or makes insignificant modification in an adequate EIR.” (CEQA Guidelines Section 15088.5(b))

Per CEQA Guidelines Section 15088.5(a), new information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect on the project or a feasible way to mitigate or avoid such an effect that the project’s proponents have declined to implement. “Significant new information” requiring recirculation includes, for example, a disclosure showing:

1. A new significant environmental impact that would result from the project (or any alternative) or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The changes and new information provided in the Final EIR (including the information contained in Chapter 2, *Updated Project Information*, and Chapter 4, *Errata to the Draft EIR*) merely amplifies and clarifies the Draft EIR analysis and do not include identification of new significant impacts or more severe impacts of any previously-identified significant impacts associated with the Project or mitigation measures, or new Project alternatives or mitigation measures that warrant consideration. None of the revisions made in the Final EIR change the significance findings of the Draft EIR or identify a new or more severe impact not disclosed in the Draft EIR or otherwise constitute significant new information requiring recirculation of the EIR.

The City finds the EIR is adequate and none of the commenters disclose any new “significant information” as defined by CEQA that would require recirculation of the EIR. No new significant or substantially more severe environmental impacts have been identified that would result from the Project or from an alternative or a new mitigation measure proposed as part of the Project. Moreover, no new feasible mitigation measures or alternatives have been identified that are considerably different from others previously analyzed and would clearly lessen the significant environmental impacts of the Project that the City has declined to implement. All of the responses

to comments contained in this Final EIR merely provide information that clarifies and amplifies the evaluation of impacts contained in the Draft EIR. The City of Mountain View further finds that incorporating the new information does not deprive the public of a meaningful opportunity to comment on the Project or its effects, and that no information has been added to the Final EIR that would warrant recirculation pursuant to Public Resources Code Section 21092.1.

Pursuant to CEQA Guidelines Section 15091(a), based on the foregoing Findings of Fact and the information contained in the record, the City Council has made one or more of the following findings with respect to each of the significant effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project, which avoid or substantially lessen the significant effects as identified in the Final EIR. As described above, mitigation measures have been incorporated for significant effects to Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Transportation, and Utilities and Service Systems.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. As described above, a mitigation measure for Hazards and Hazardous Materials requires review and approval by regional regulatory agencies that oversee site contamination issues.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or Project alternatives identified in the Final EIR. As described above, there are specific overriding considerations that make infeasible project alternatives and potential mitigation measures that would reduce a significant Air Quality impact to a less than significant level.

APPENDIX A

Mitigation Monitoring and Reporting Program

Purpose of this Document

This chapter contains the Mitigation Monitoring and Reporting Program (MMRP) prepared in compliance with Public Resources Code Section 21081.6(a). The MMRP will be considered for adoption by the Environmental Planning Commission (EPC) and/or the City Council and will aid the City in its implementation and monitoring of measures included in the EIR and adopted by the EPC and/or City Council.

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM**

	Implemented By	When Implemented	Monitored By	Verified By
Air Quality				
<p>Mitigation Measure AIR-1: Emission Reduction Measures for Projects Exceeding the Significance Thresholds for Criteria Pollutants.</p> <p>Project applicants proposing projects that exceed BAAQMD screening levels shall prepare a project-level criteria air pollutant assessment of construction and operational emissions at the time the project is proposed. The project-level assessment shall either include a comparison of the project with other similar projects where a quantitative analysis has been conducted, or shall provide a project-specific criteria air pollutant analysis to determine whether the project exceeds the BAAQMD's criteria air pollutant thresholds.</p> <p>In the event that a project-specific analysis finds that the project could result in criteria air pollutant emissions that exceed BAAQMD significance thresholds, the project applicant shall implement the following emission reduction measures to the degree necessary to reduce the impact to less than the significance thresholds, and shall implement additional feasible measures if necessary to reduce the impact to less than the significance thresholds.</p> <p>Clean Construction Equipment.</p> <ol style="list-style-type: none"> 1. The project applicant shall use electric construction equipment when feasible. 2. The project applicant shall ensure that all diesel off-road equipment shall have engines that meet the Tier 4 Final off-road emission standards, as certified by CARB, except as provided for in this section. This requirement shall be verified through submittal of an equipment inventory that includes the following information: (1) Type of Equipment, (2) Engine Year and Age, (3) Number of Years Since Rebuild of Engine (if applicable), (4) Type of Fuel Used, (5) Engine HP, (6) Verified Diesel Emission Control Strategy (VDECS) information if applicable and other related equipment data. A Certification Statement is also required to be made by the Contractor for documentation of compliance and for future review by the BAAQMD as necessary. The Certification Statement must state that the Contractor agrees to compliance and acknowledges that a violation of this requirement shall constitute a material breach of contract. <p>The City may waive the requirement for Tier 4 Final equipment only under the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible or not commercially available; the equipment would not produce desired emissions reduction due to expected operating modes; installation of the equipment would create a safety hazard or impaired visibility for the operator; or there is a compelling emergency need to use other alternate off-road equipment. For purposes of this mitigation measure, "commercially available" shall mean the availability of Tier 4 Final engines similar to the availability for other large-scale construction projects in the region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction for the project and (ii) geographic proximity to the project site of Tier 4 Final equipment.</p> <ol style="list-style-type: none"> 3. The project applicant shall require the idling time for off-road and on-road equipment be limited to no more than 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment. Legible and visible signs shall be posted in multiple languages (English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit. 	Project applicant	During construction	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Operational Emission Reductions</p> <ol style="list-style-type: none"> Projects shall be constructed without natural gas infrastructure and shall be “all electric.” As required by Mitigation Measure GHG-1, projects shall provide EV charging infrastructure consistent with the applicable Tier 2 CALGreen standards in effect at the time. Project applicants that do not screen out from VMT impact analysis shall implement VMT reduction measures as required by Mitigation Measure TRA-1. 				
<p>Mitigation Measure AIR-2: Emission Reduction Measures for Subsequent Projects Exceeding the Significance Thresholds for Health Risks from Construction.</p> <p>Project applicants within the HEU area proposing projects within 1,000 feet of existing or approved sensitive receptors shall prepare a project-level HRA of construction impacts at the time the project is proposed. The HRA shall be based on project-specific construction schedule, equipment and activity data and shall be conducted using methods and models approved by the BAAQMD, CARB, OEHHA and U.S. EPA. Estimated project-level health risks shall be compared to the BAAQMD’s health risk significance thresholds for projects.</p> <p>In the event that a project-specific HRA finds that the project could result in significant construction health risks that exceed BAAQMD significance thresholds, the project applicant shall implement Mitigation Measure AIR-1’s requirement for the use of all Tier 4 Final construction equipment to reduce project-level health risks to a less-than-significant level. In addition, all tower cranes, forklifts, man- and material- lifts shall be electric powered.</p>	Project applicant	Prior to construction	Community Development Department	Community Development Department
Biological Resources				
<p>Mitigation Measure BIO-1: Special-Status Bat Protection Measures.</p> <p>In coordination with the City, a preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the subsequent project sites to characterize potential bat habitat and identify active roost sites. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, the following measures shall be implemented:</p> <ul style="list-style-type: none"> Removal of trees shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 16 – August 14) and outside the months of winter torpor (approximately October 16 – February 28), to the extent feasible. If removal of trees during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and building removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by a qualified biologist. A 100-foot no-disturbance buffer is a typical protective buffer distance; however, this may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation) as well as the type of construction activity which would occur around the roost site. The qualified biologist shall be present during tree removal if potential bat roosting habitat or active bat roosts are present. Trees with active roosts shall only be removed when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F. 	Qualified project staff biologist	Prior to construction	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<ul style="list-style-type: none"> • Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process: <ul style="list-style-type: none"> - On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. - On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). 				
Cultural Resources and Tribal Cultural Resources				
<p>Mitigation Measure CUL 1a: Historic Resource Evaluation.</p> <p>Prior to issuance of a demolition permit for any previously unevaluated building 45-years of age or older on a site included in the housing sites inventory, the City shall require an evaluation of historical significance that includes consideration of the criteria for listing in the National Register of Historic Places, the California Register of Historical Resources, and the Mountain View Register of Historic Resources. This evaluation shall be completed by a professional who meets the Secretary of the Interior’s Professional Qualifications for History, Architecture, Architectural History, or Historic Architecture.</p> <p>In accordance with Section 5024.1, if the building has been previously evaluated for eligibility as a historic resource under CEQA and that evaluation or survey is more than five-years old, the findings of that evaluation should be confirmed by a professional who meets the Secretary of the Interior’s Professional Qualifications as stated above.</p>	Qualified project staff professional	Prior to demolition permit issuance	Community Development Department	Community Development Department
<p>Mitigation Measure CUL 1b: Historic Resource Avoidance.</p> <p>If, after implementation of Mitigation Measure CUL 1a, the subject property is found to qualify as a historic resource and the proposed project includes demolition of the historic resource, the project shall be redesigned to remove or avoid demolition. Any redesign that includes significant alteration of the historic resource, as defined by Section 36.54.55(e) of the City of Mountain View Zoning Code, shall be required to comply with City Standard Condition of Approval (Secretary of the Interior Standards).</p>	Qualified project staff professional	Prior to demolition permit issuance	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Mitigation Measure CUL 2a: Inadvertent Discovery of Cultural Resources.</p> <p>If pre-contact or historic-era archaeological resources are encountered during project construction and implementation, all construction activities within 100 feet shall halt and the City shall be notified. Pre-contact 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, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology shall inspect the findings within 24 hours of discovery.</p> <p>If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4, with a preference for preservation in place. If preservation in place is feasible, this may be accomplished through one of the following means: (1) siting improvements to completely avoid the archaeological resource; (2) incorporating the resource into a park or dedicated open space, by deeding the resource into a permanent conservation easement; (3) capping and covering the resource before building the project on the resource site after the resource has been thoroughly studied by a SOIS qualified archaeologist and a report written on the findings.</p> <p>If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).</p>	<p>Construction contractors, City staff, Qualified archaeologist</p>	<p>During project construction</p>	<p>Community Development Department</p>	<p>Community Development Department</p>

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
<p>Mitigation Measure CUL 2b: Cultural Resources Study Requirements.</p> <p>Prior to approval of development permits for multifamily projects that include ground-disturbing activities, individual project applicants shall request a non-confidential records search from the Northwest Information Center (NWIC) to determine if the proposed project site has archaeological sensitivity. If the NWIC recommends that the proposed project site be reviewed by an archaeologist, the City shall require a site-specific cultural resources study by an archaeologist meeting the U.S. Secretary of the Interior’s Standards (SOIS) for Archeology. The study shall consist of a cultural report that includes the results of: a cultural resources records search performed at the NWIC of the California Historical Resources Information System for the project area, a pedestrian survey of the project area, a historic context, an assessment of the sensitivity of the project area for buried precontact and historic-era resources, and identify if the project would potentially impact cultural resources. If the archaeologist determines that known cultural resources or potential archaeological sensitivity areas may be impacted by the project, additional research or treatment, potentially including subsurface testing, and/or a cultural resources awareness training may be required to identify, evaluate, and mitigate impacts to cultural resources, as recommended by the SOIS qualified archaeologist. If avoidance is not feasible, the City shall consult with appropriate Native American tribes (if the resource is pre-contact or indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). The cultural report detailing the results of the research shall be prepared and submitted for review by the City and a final draft shall be submitted to the NWIC.</p>	City staff, Qualified archaeologist	Prior to approval of development permits for multifamily projects that include ground-disturbing activities	Community Development Department	Community Development Department
Greenhouse Gas Emissions				
<p>Mitigation Measure GHG-1: Require Compliance with EV Requirements in CALGreen Tier 2.</p> <p>Subsequent development projects proposed as part of the HEU shall comply with EV requirements in the most recently adopted version of CALGreen Tier 2 at the time that a building permit application is filed.</p>	Project sponsor	When building permit application is filed	Community Development Department	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
Hazards and Hazardous Materials				
<p>Mitigation Measure HAZ-1: Phase I Environmental Site Assessment.</p> <p>Prior to the initiation of any construction requiring ground-disturbing activities on listed active hazardous materials cleanup sites, the project applicant shall complete a Phase I environmental site assessment for that property in accordance with American Society for Testing and Materials Standard E1527 for those active hazardous materials sites to ascertain their current status. Any recommended follow up sampling (i.e., Phase II activities) set forth in the Phase I assessment shall be implemented prior to construction. The results of Phase II studies, if necessary, shall be submitted to the local overseeing agency and any required remediation or further delineation of identified contamination shall be completed prior to commencement of construction.</p> <p>Prior to final project design of any individual project that includes any earth-disturbing activities, the project applicant shall conduct a Phase I Environmental Site Assessment (Phase I assessment). The Phase I assessment shall be prepared in general accordance with ASTM Standard E1527-21, Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process (or most current edition that is in force at the time of final project design), which is the current industry standard. The Phase I assessment shall include a records review of appropriate federal, State, and local databases within ASTM-listed search distances regarding hazardous materials use, storage, or disposal at the given site, a review of historical topographic maps and aerial photographs, a site reconnaissance, interviews with persons knowledgeable about the sites historical uses, and review of other relevant existing information that could identify the potential existence of Recognized Environmental Conditions, including hazardous materials, or contaminated soil or groundwater. If no Recognized Environmental Conditions are identified, then no further action would be required.</p> <p>If Recognized Environmental Conditions are identified and the Phase I assessment recommends further action, the project applicant shall conduct the appropriate follow-up actions, which may include further records review, sampling of potentially hazardous materials, and possibly site cleanup. In the event that site cleanup is required, the project shall not proceed until the site has been cleaned up to the satisfaction of the appropriate regulatory agency (e.g., DTSC, RWQCB, or SCCEHD) such that the regulatory agency issues a No Further Action letter or equivalent.</p>	Project applicant	Prior to final project design and initiation of any construction requiring ground-disturbing activities	Oversight by the City's Community Development Department, DTSC, RWQCB, and/or SCCEHD	Community Development Department

**CITY OF MOUNTAIN VIEW HOUSING ELEMENT UPDATE
MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)**

	Implemented By	When Implemented	Monitored By	Verified By
Transportation				
<p>Mitigation Measure TRA-1: Implement Vehicle Miles Traveled (VMT) Reduction Measures. Individual multifamily housing development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods outlined by the City's most recent VMT guidelines. Projects that result in a significant impact shall include travel demand management measures and/or physical measures (i.e. improving multimodal transportation network, improving street connectivity) to reduce VMT. The City's VMT guidelines identify four tiers of mitigation measures, all of which can be quantified within the Santa Clara Valley Transportation Authority (VTA) VMT tool:</p> <ul style="list-style-type: none"> • Tier 1— Project Characteristics. Although it may be difficult to revise a project during environmental review, Tier 1 strategies allow the user to increase the project density, diversity of land uses, and add affordable and/or below-market-rate housing to the residential and employment projects to reduce VMT. • Tier 2—Multi-Modal Network Improvements. These improvements include implementing bicycle lanes, improving the pedestrian network, implementing traffic calming, increasing transit accessibility, and improving network connectivity. These improvements require coordination with Mountain View staff and additional studies (signal warrant studies, traffic calming studies, etc.) to determine feasibility. Consultants should prioritize public improvements included in the City's approved plans which contain various transportation improvements to bicycle, pedestrian, and roadway facilities as VMT mitigation. (See above for list of adopted plans and policies.) • Tier 3—Parking. Parking strategies shown to effectively reduce VMT include reduced parking, increased bike parking or end-of-trip bike facilities. In order to be most effective, the areas surrounding the projects with reduced parking should have parking permit programs. • Tier 4—Travel Demand Management (TDM) There are a multitude of TDM measures to reduce VMT. The VMT Tool includes all allowable TDM measures and their relative effectiveness. Based on the percentage of participation selected by the user, the VMT Tool calculates the resulting VMT reduction. The various TDM measures in the VMT Tool include school carpool programs, bike-sharing programs, car-sharing programs, trip reduction marketing/educational campaigns, parking cash-out, subsidized transit, telecommuting, alternative work schedules, shuttles, pay to park, ride-sharing, unbundled parking, and subsidized vanpools. 	Consultants and City Staff	During environmental review	Community Development Department and Public Works Department	Community Development Department and Public Works Department
Utilities and Service Systems				
<p>Mitigation Measure UTL-1: Fair-Share Contributions Toward Utility Improvements. Subsequent development projects shall contribute the fair share amount identified by the City of Mountain View Public Works Department to fund capital improvements to the water, sanitary sewer, and stormwater drainage systems prior to issuance of a building permit.</p>	Project applicant	Prior to building permit issuance	Community Development Department and Public Works Department	Community Development Department and Public Works Department